

LEGEND

| | | | |
|--|-------------------------------|--|-------------------------|
| | GRANITE BND | | CATCH BASIN |
| | GRANITE BND W/DH | | DRAIN MANHOLE |
| | MARBLE BND W/DH | | SEWER MANHOLE |
| | MARBLE BND | | TELEPHONE MANHOLE |
| | CONC H BND | | ELECTRIC MANHOLE |
| | CONC BND W/DH | | LUMINAIRE |
| | IP FOUND | | PROPERTY LINE |
| | IP W/CAP | | EDGE OF PAVEMENT |
| | GUN BARREL FND | | EDGE OF GRAVEL |
| | DRILL HOLE-SURVEY CONTROL PT. | | SANITARY SEWER |
| | PTS STAKE | | STORM SEWER |
| | MAG NAIL | | WATER |
| | PK NAIL | | GAS |
| | WIRE FENCE | | OVERHEAD LINES |
| | EDGE OF TREELINE | | TELEPHONE |
| | WOOD FENCE | | ELECTRIC |
| | CHAINLINK FENCE | | GUARDRAIL |
| | TREES | | RETAINING WALL |
| | SHRUBERY | | ROCK/BOULDER |
| | CARWASH VACUUM STATION | | POST |
| | GUY ANCHOR | | WATER SHUTOFF VALVE |
| | MONITORING WELL | | GATE VALVE OR GAS VALVE |
| | EXISTING CONTOURS | | HYDRANT |
| | LIMIT OF REMEDIATION | | SIGNPOST |
| | EDGE OF RIVER | | PARKING BUMPER |
| | | | UTILITY POLE |

| | |
|--|-----------------------------------|
| | DETAIL NUMBER |
| | SHEET WHERE DETAIL IS SHOWN |
| | SHEET WHERE DETAIL IS REFERENCED |
| | SECTION IDENTIFIER |
| | SHEET WHERE SECTION IS SHOWN |
| | SHEET WHERE SECTION IS REFERENCED |
| | CELL BOUNDARY |
| | STAGING AREA |
| | FINAL GRADE CONTOURS |
| | PRECAST CONCRETE WALL PANELS |
| | TOP OF SLOPE |
| | TOE OF SLOPE |
| | RIVER |
| | FLOW DIRECTION |
| | CONTROL POINT FOR SHEET PILE WALL |
| | SHEET PILE |
| | RIVER WALK |
| | FINAL GRADE SPOT ELEV. |

GENERAL NOTES:

- EXISTING SURVEYS PROVIDED BY: SK-DESIGN GROUP INC., 2 FEDERICO DRIVE, PITTSFIELD MA 01201, JAMES E. SEIDL P.L.S.; COL-EAST, INC., HARRIMAN & WEST AIRPORT, P.O. BOX 347, NORTH ADAMS MA 01247; HILL ENGINEERS, ARCHITECTS, PLANNERS, INC., 50 DEPOT ST., DALTON MA 01226.
- TOPOGRAPHIC FIELD SURVEY AND PLANS WERE PREPARED IN ACCORDANCE WITH THE PROCEDURAL AND TECHNICAL STANDARDS FOR THE PRACTICE OF LAND SURVEYING IN THE COMMONWEALTH OF MASSACHUSETTS BETWEEN SEPTEMBER 19, 2000 AND DECEMBER 1, 2000.
- HORIZONTAL DATUM BASED ON MASSACHUSETTS STATE PLANE COORDINATES NAD 1983.
- VERTICAL DATUM BASED ON NAVD 1988.
- "EXCAVATION SUBCONTRACTOR" SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO EXCAVATING, TRENCHING, OR GRADING.
- "EXCAVATION SUBCONTRACTOR" SHALL VERIFY AND COORDINATE THE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK.
- DISCREPANCIES IDENTIFIED BY THE "EXCAVATION SUBCONTRACTOR" BETWEEN THE SPECIFICATIONS, DRAWINGS, AND SITE CONDITIONS SHALL BE REPORTED TO THE GENERAL CONTRACTOR. WORK PERFORMED BY THE "EXCAVATION SUBCONTRACTOR" PRIOR TO RESOLUTION OF SUCH DISCREPANCY BY THE GENERAL CONTRACTOR SHALL BE DONE AT THE "EXCAVATION SUBCONTRACTOR'S" RISK.
- THE "EXCAVATION SUBCONTRACTOR" IS RESPONSIBLE FOR INFORMATION CONTAINED IN THE FOLLOWING REFERENCES:
 - DRAFT BASIS OF DESIGN FOR PHASE 2 OF THE 1.5-MILE REMOVAL ACTION, DCN GE-121902-ABJE, DECEMBER-2002.
 - PRE-DESIGN SUMMARY, 1.5 MILE REMOVAL ACTION PHASE 2, DCN: GE-050202-AAZL, JULY, 2002.
- LIMITS OF REMEDIATION ARE BASED ON: AVERAGE ANNUAL WATER FLOW ELEVATION AS INDICATED IN HEC-RAS MODEL OUTPUT (SEE DRAFT BASIS OF DESIGN FOR PHASE 2) FOR STATION 527+60 TO STA. 543+50. AVERAGE ANNUAL WATER FLOW ELEVATION USED TO DISTINGUISH BETWEEN RIVER SEDIMENTS AND BANK SOILS.
- EXCAVATION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL PROJECT RELATED SNOW REMOVAL, WITHIN THE AREAS SHOWN ON THESE DRAWINGS AND OUTSIDE OF THE AREAS SHOWN ON THESE DRAWINGS, SUCH AS ACCESS ROADS, STAGING AREAS, TRAILER AREAS, STOCKPILE AREAS, ETC. SNOW SHALL NOT BE PLOWED ONTO RESTORED RIVERBANKS, BEYOND SILT FENCES, OR IN AREAS NOT APPROVED BY THE ENGINEER.

DRAWING SCHEDULE

| SHEET | SHEET REFERENCE NUMBER | TITLE | SHEET | SHEET REFERENCE NUMBER | TITLE |
|-------|------------------------|--|-------|------------------------|----------------------------------|
| 1 | 1000 | GENERAL NOTES AND LEGEND | 16 | 2010 | CROSS SECTIONS 5 OF 5 |
| 2 | 1001 | PLAN OF EXISTING CONDITIONS 1 OF 2 | 17 | 2101 | REVEGETATION RESTORATION DETAILS |
| 3 | 1002 | PLAN OF EXISTING CONDITIONS 2 OF 2 | | | |
| 4 | 1003 | CONTAMINATED MATERIAL REMOVAL AREAS 1 OF 2 | | | |
| 5 | 1004 | CONTAMINATED MATERIAL REMOVAL AREAS 2 OF 2 | | | |
| 6 | 2000 | GRADING PLAN 1 OF 2 | | | |
| 7 | 2001 | GRADING PLAN 2 OF 2 | | | |
| 8 | 2002 | RIVERBED AND RIVERBANK ARMORING DETAILS | | | |
| 9 | 2003 | BOARDWALK LAYOUT PLAN | | | |
| 10 | 2004 | BOARDWALK DETAILS 1 OF 2 | | | |
| 11 | 2005 | BOARDWALK DETAILS 2 OF 2 | | | |
| 12 | 2006 | CROSS SECTIONS 1 OF 5 | | | |
| 13 | 2007 | CROSS SECTIONS 2 OF 5 | | | |
| 14 | 2008 | CROSS SECTIONS 3 OF 5 | | | |
| 15 | 2009 | CROSS SECTIONS 4 OF 5 | | | |

NOT INCLUDED IN THIS PACKAGE
TO BE ISSUED UNDER SEPARATE COVER



| Rev. | Date | Design | File No. | SPEC. No. | File Name | Plot Date | Plot Scale |
|------|----------|------------------------|----------|-----------|-----------|-----------|------------|
| B | 10/20/04 | FINAL DESIGN SUBMITTAL | 1000.DWG | | 1000.DWG | 2-11-04 | AS SHOWN |
| A | 10/20/04 | DRAFT DESIGN SUBMITTAL | | | | | |

DESIGNED BY: TD/RJ
DWG BY: BEG
REVIEWED BY: TD
SUBMITTED BY: Chief, Arch. Section

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

WESTON SOLUTIONS

1.5 MILE REMOVAL ACTION - PHASE 2 - STA 527+60 TO STA 543+50
ENVIRONMENTAL REMEDIATION CONTRACT (SSERO)
GE/HOUSATONIC RIVER SITE
PITTSFIELD, MASSACHUSETTS

GENERAL NOTES AND LEGEND

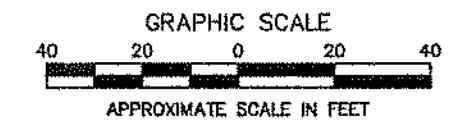
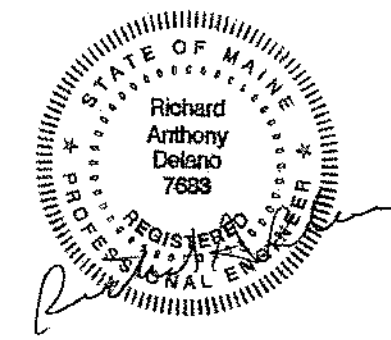
Sheet reference number:
1000
1 OF 17

FINAL DESIGN SUBMITTAL

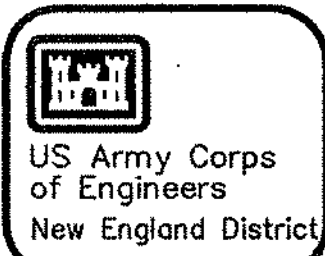
M:\Design\Drawings\SSERC\Drawings\Drawings - Civil to Geotech - 600 ft to Dunes\1001-1002.dwg, 1001, 2/20/2004, 8:56:04 AM, ghorash, 1:1



MATCHLINE (SEE DRAWING 1002)



FINAL DESIGN SUBMITTAL



| Symbol | Description | Date | Appr. | Symbol | Description | Date | Appr. |
|--------|------------------------|----------|-------|--------|-------------|------|-------|
| B | FINAL DESIGN SUBMITTAL | 1/20/04 | | | | | |
| A | DRAFT DESIGN SUBMITTAL | 10/20/03 | | | | | |

| Designed by: | Date: | Rev. |
|----------------------|------------------|---------------|
| TD/RJ | | B |
| Dwn by: | Design file no.: | |
| BEG | | |
| Reviewed by: | SPEC. No.: | |
| TD | | |
| Submitted by: | File name: | 1001-1002.DWG |
| Chief, Arch. Section | Plot date: | 2-11-04 |
| | Plot scale: | AS SHOWN |

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

WESTON
SOLUTIONS

WOODLOT
ILLUSTRATIONS

1.5 MILE REMOVAL ACTION - PHASE 2 - STA 527+60 TO STA 543+50
ENVIRONMENTAL REMEDIATION CONTRACT (SSERC)
GE/HOUSA TONIC RIVER SITE
PITTSFIELD, MASSACHUSETTS

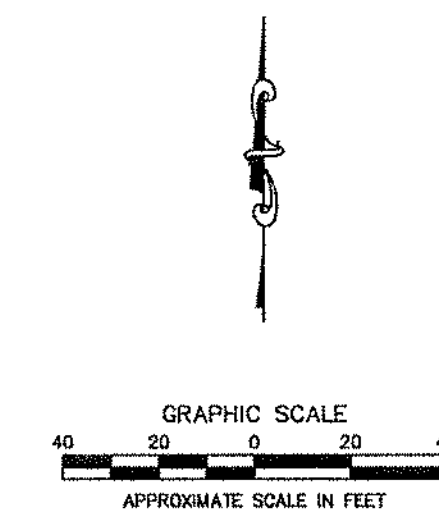
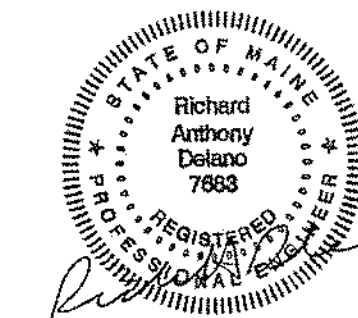
PLAN OF EXISTING CONDITIONS
1 OF 2

Sheet
reference
number:
1001
2 OF 17

A detailed topographic map of a residential area. The map features contour lines indicating elevation, with labels such as 540.00, 541.00, 542.00, 543.00, 544.00, 545.00, 546.00, 547.00, 548.00, 549.00, 550.00, 551.00, 552.00, 553.00, 554.00, 555.00, 556.00, 557.00, 558.00, 559.00, 560.00, 561.00, 562.00, 563.00, 564.00, 565.00, 566.00, 567.00, 568.00, 569.00, 570.00, 571.00, 572.00, 573.00, 574.00, 575.00, 576.00, 577.00, 578.00, 579.00, 580.00, 581.00, 582.00, 583.00, 584.00, 585.00, 586.00, 587.00, 588.00, 589.00, 590.00, 591.00, 592.00, 593.00, 594.00, 595.00, 596.00, 597.00, 598.00, 599.00, 600.00, 601.00, 602.00, 603.00, 604.00, 605.00, 606.00, 607.00, 608.00, 609.00, 610.00, 611.00, 612.00, 613.00, 614.00, 615.00, 616.00, 617.00, 618.00, 619.00, 620.00, 621.00, 622.00, 623.00, 624.00, 625.00, 626.00, 627.00, 628.00, 629.00, 630.00, 631.00, 632.00, 633.00, 634.00, 635.00, 636.00, 637.00, 638.00, 639.00, 640.00, 641.00, 642.00, 643.00, 644.00, 645.00, 646.00, 647.00, 648.00, 649.00, 650.00, 651.00, 652.00, 653.00, 654.00, 655.00, 656.00, 657.00, 658.00, 659.00, 660.00, 661.00, 662.00, 663.00, 664.00, 665.00, 666.00, 667.00, 668.00, 669.00, 670.00, 671.00, 672.00, 673.00, 674.00, 675.00, 676.00, 677.00, 678.00, 679.00, 680.00, 681.00, 682.00, 683.00, 684.00, 685.00, 686.00, 687.00, 688.00, 689.00, 690.00, 691.00, 692.00, 693.00, 694.00, 695.00, 696.00, 697.00, 698.00, 699.00, 700.00, 701.00, 702.00, 703.00, 704.00, 705.00, 706.00, 707.00, 708.00, 709.00, 710.00, 711.00, 712.00, 713.00, 714.00, 715.00, 716.00, 717.00, 718.00, 719.00, 720.00, 721.00, 722.00, 723.00, 724.00, 725.00, 726.00, 727.00, 728.00, 729.00, 730.00, 731.00, 732.00, 733.00, 734.00, 735.00, 736.00, 737.00, 738.00, 739.00, 740.00, 741.00, 742.00, 743.00, 744.00, 745.00, 746.00, 747.00, 748.00, 749.00, 750.00, 751.00, 752.00, 753.00, 754.00, 755.00, 756.00, 757.00, 758.00, 759.00, 760.00, 761.00, 762.00, 763.00, 764.00, 765.00, 766.00, 767.00, 768.00, 769.00, 770.00, 771.00, 772.00, 773.00, 774.00, 775.00, 776.00, 777.00, 778.00, 779.00, 780.00, 781.00, 782.00, 783.00, 784.00, 785.00, 786.00, 787.00, 788.00, 789.00, 790.00, 791.00, 792.00, 793.00, 794.00, 795.00, 796.00, 797.00, 798.00, 799.00, 800.00, 801.00, 802.00, 803.00, 804.00, 805.00, 806.00, 807.00, 808.00, 809.00, 810.00, 811.00, 812.00, 813.00, 814.00, 815.00, 816.00, 817.00, 818.00, 819.00, 820.00, 821.00, 822.00, 823.00, 824.00, 825.00, 826.00, 827.00, 828.00, 829.00, 830.00, 831.00, 832.00, 833.00, 834.00, 835.00, 836.00, 837.00, 838.00, 839.00, 840.00, 841.00, 842.00, 843.00, 844.00, 845.00, 846.00, 847.00, 848.00, 849.00, 850.00, 851.00, 852.00, 853.00, 854.00, 855.00, 856.00, 857.00, 858.00, 859.00, 860.00, 861.00, 862.00, 863.00, 864.00, 865.00, 866.00, 867.00, 868.00, 869.00, 870.00, 871.00, 872.00, 873.00, 874.00, 875.00, 876.00, 877.00, 878.00, 879.00, 880.00, 881.00, 882.00, 883.00, 884.00, 885.00, 886.00, 887.00, 888.00, 889.00, 890.00, 891.00, 892.00, 893.00, 894.00, 895.00, 896.00, 897.00, 898.00, 899.00, 900.00, 901.00, 902.00, 903.00, 904.00, 905.00, 906.00, 907.00, 908.00, 909.00, 910.00, 911.00, 912.00, 913.00, 914.00, 915.00, 916.00, 917.00, 918.00, 919.00, 920.00, 921.00, 922.00, 923.00, 924.00, 925.00, 926.00, 927.00, 928.00, 929.00, 930.00, 931.00, 932.00, 933.00, 934.00, 935.00, 936.00, 937.00, 938.00, 939.00, 940.00, 941.00, 942.00, 943.00, 944.00, 945.00, 946.00, 947.00, 948.00, 949.00, 950.00, 951.00, 952.00, 953.00, 954.00, 955.00, 956.00, 957.00, 958.00, 959.00, 960.00, 961.00, 962.00, 963.00, 964.00, 965.00, 966.00, 967.00, 968.00, 969.00, 970.00, 971.00, 972.00, 973.00, 974.00, 975.00, 976.00, 977.00, 978.00, 979.00, 980.00, 981.00, 982.00, 983.00, 984.00, 985.00, 986.00, 987.00, 988.00, 989.00, 990.00, 991.00, 992.00, 993.00, 994.00, 995.00, 996.00, 997.00, 998.00, 999.00, 1000.00. The map also shows several buildings, a road labeled 'DAWES AVENUE', and a stream labeled 'HOUSTON RIVER'. The word 'CALEDONIA' is also visible on the map.

~~DAVES~~

DAWES AVENUE



US Army Corps
of Engineers
New England District

| Symbol | Description | Date | Author |
|--------|------------------------|---------|--------|
| B | FINAL DESIGN SUBMITTAL | 2/10/04 | |
| A | DRAFT DESIGN SUBMITTAL | 2/24/03 | |

| | | |
|-----------------------|--------------------------|-----------|
| Designed by: TD/RJ | Date: | Rev. B |
| Dwn by: BEG | Design file no: | |
| TD | | |
| Reviewed by: | SPEC. No.: | |
| Submitted by: | File name: 1001-1002.DWG | |
| Chief Arch. Section | Plot date: 2-11-04 | |
| | Plot scale: AS SHOWN | |

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

1.5 MILE REMEDIAL ACTION - PHASE 2 - STA 527+60 TO STA 543+50
ENVIRONMENTAL REMEDIATION CONTRACT (SSERC)
GE/HOUSTON RIVER SITE
PITTSFIELD, MASSACHUSETTS

PLAN OF EXISTING CONDITIONS
2 OF 2

Sheet
reference
number:
1002
3 OF 17

1: \\Design\DWG\ACCE\SSERC\2nd_0.5m\Design Drawings - Elm to Doves - Elm to Doves = 600 ft to Doves\1001-1002.dwg, 1002, 2/20/2004 8:57:14 AM, girddeb, 1:

3' OR BEDROCK

HOUSATONIC RIVER

DAWES AVENUE

0-1(TSCA)

0-2(TSCA)

0-3(TSCA)

1-2(TSCA)

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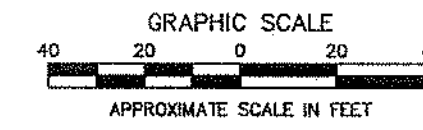
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78-3(TSCA)

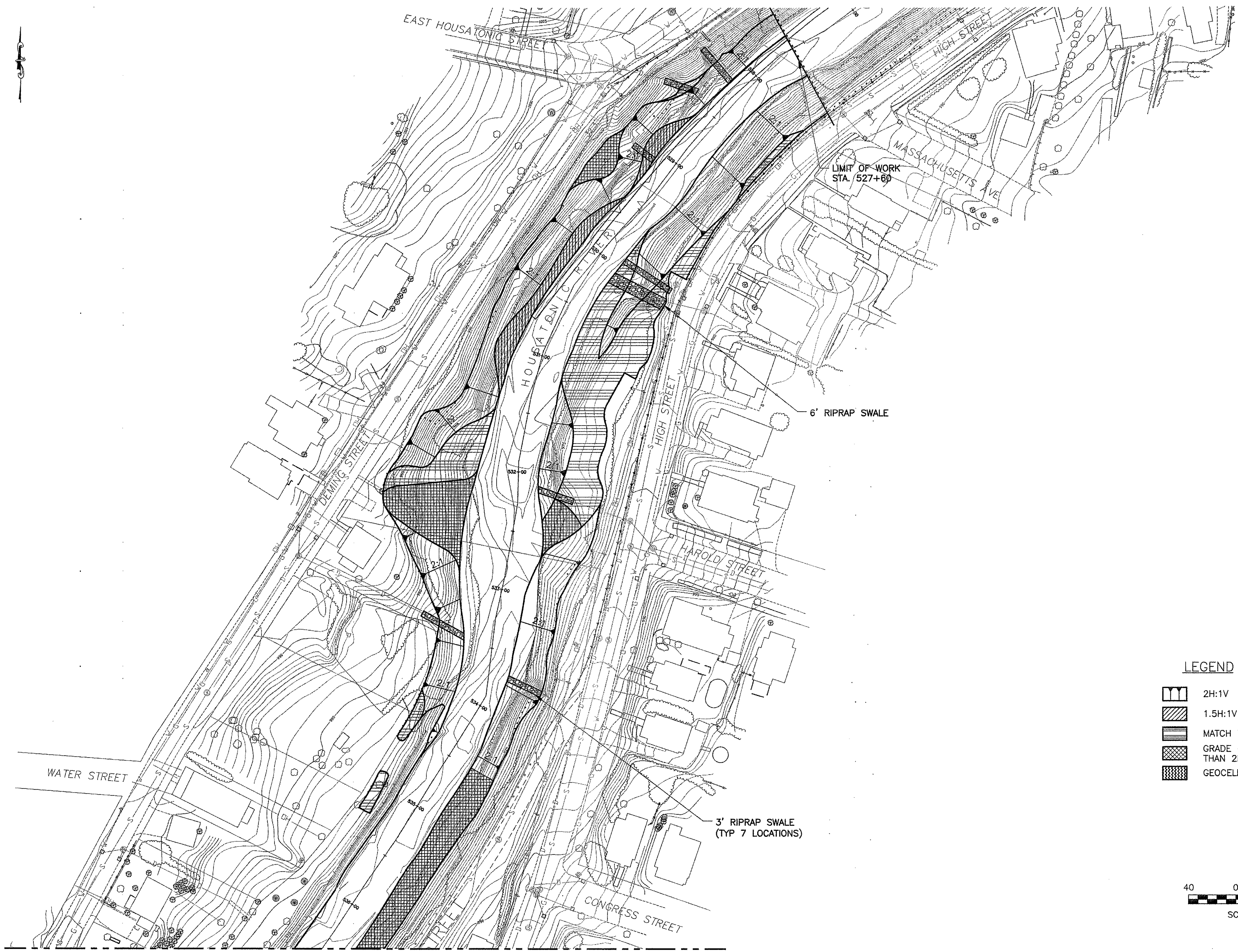
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79-3(TSCA)

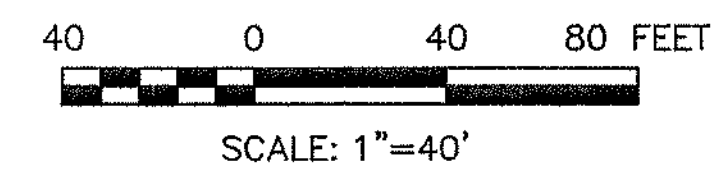
1. ALL AREAS SHALL BE EXCAVATED AS NON-TSCA MATERIAL EXCEPT WHERE NOTED AS TSCA MATERIAL.
2. SEDIMENT EXCAVATION SHALL PROCEED TO A MINIMUM DEPTH OF 3' OR BEDROCK, WHICH EVER OCCURS FIRST. IF BEDROCK OR UNCONTAMINATED MATERIAL (TYPICALLY GLACIAL TILL, AS DETERMINED THROUGH SAMPLING AND SUBSEQUENT FIELD OBSERVATION BY THE ENGINEER) HAVE NOT BEEN REACHED AT 3', EXCAVATION SHALL CONTINUE UNTIL BEDROCK IS REACHED, UNCONTAMINATED MATERIAL IS REACHED, OR IT IS NO LONGER FEASIBLE TO CONTINUE EXCAVATION AS DETERMINED BY THE ENGINEER.
3. FOR PURPOSES OF THIS DRAWING, EXCAVATION DEPTHS REPRESENT THE DEPTH OF CONTAMINATED MATERIAL. REFER TO SHEETS 2006-2010 FOR ACTUAL CUTS SHOWN ON CROSS-SECTIONS.
4. THE TWO 54" HDPE GRAVITY DIVERSION PIPES SHALL BE EXTENDED FROM APPROXIMATELY STATION 528+00 TO STATION 542+00.
5. EXCAVATION LIMITS "TOP OF BANK" TO BE DETERMINED IN THE FIELD.
6. ELECTRONIC CAD FILES AND/OR CONTROL POINTS SHALL BE PROVIDED TO THE EXCAVATION SUBCONTRACTOR AND SURVEYOR AS NECESSARY TO DEFINE THE LIMIT OF REMEDIATION IN THE FIELD.



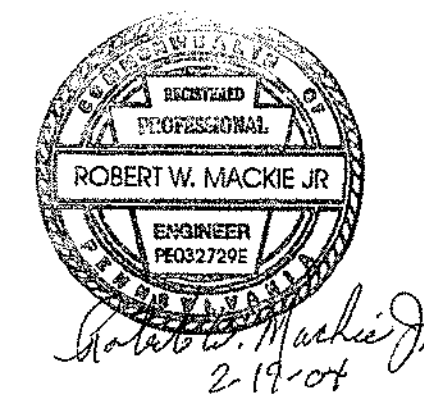
| | | |
|---|---|---|
| 15 MILE REMOVAL ACTION - PHASE 2 - STA 627+60 TO STA 643+50 ENVIRONMENTAL REMEDIATION CONTRACT (SERC) GE/HOUSATONIC RIVER SITE PITTSFIELD, MASSACHUSETTS CONTAMINATED MATERIAL REMOVAL AREAS 2 OF 2 | | Sheet reference number: <div style="font-size: 2em; font-weight: bold; text-align: center;">1004</div> 5 OF 17 |
| <div style="text-align: center;">  WESTON CONSULTANTS </div> | | DEPARTMENT OF THE ARMY CORPS OF ENGINEERS CONCORD, MASSACHUSETTS |
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| Submitted by: <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | File name: 1003-1004.DWG Plot date: 11/26/03 Plot scale: AS SHOWN | Chief, Arch. Section |



- LEGEND**
- 2H:1V
 - 1.5H:1V
 - MATCH EXISTING GRADE
 - GRADE - SLOPE FLATTER THAN 2H:1V
 - GEOCELL

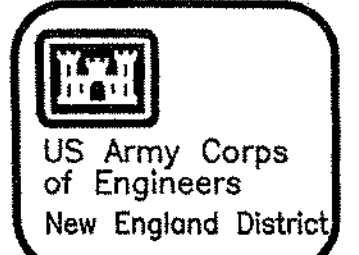


SCALE: 1"=40'



MATCHLINE (SEE DRAWING 2001)

FINAL DESIGN SUBMITTAL



| Symbol | Description | Date | Appr | Symbol | Description | Date | Appr |
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| B | FINAL DESIGN SUBMITTAL | 2/20/04 | | | | | |
| A | DRAFT DESIGN SUBMITTAL | 9/2/03 | | | | | |

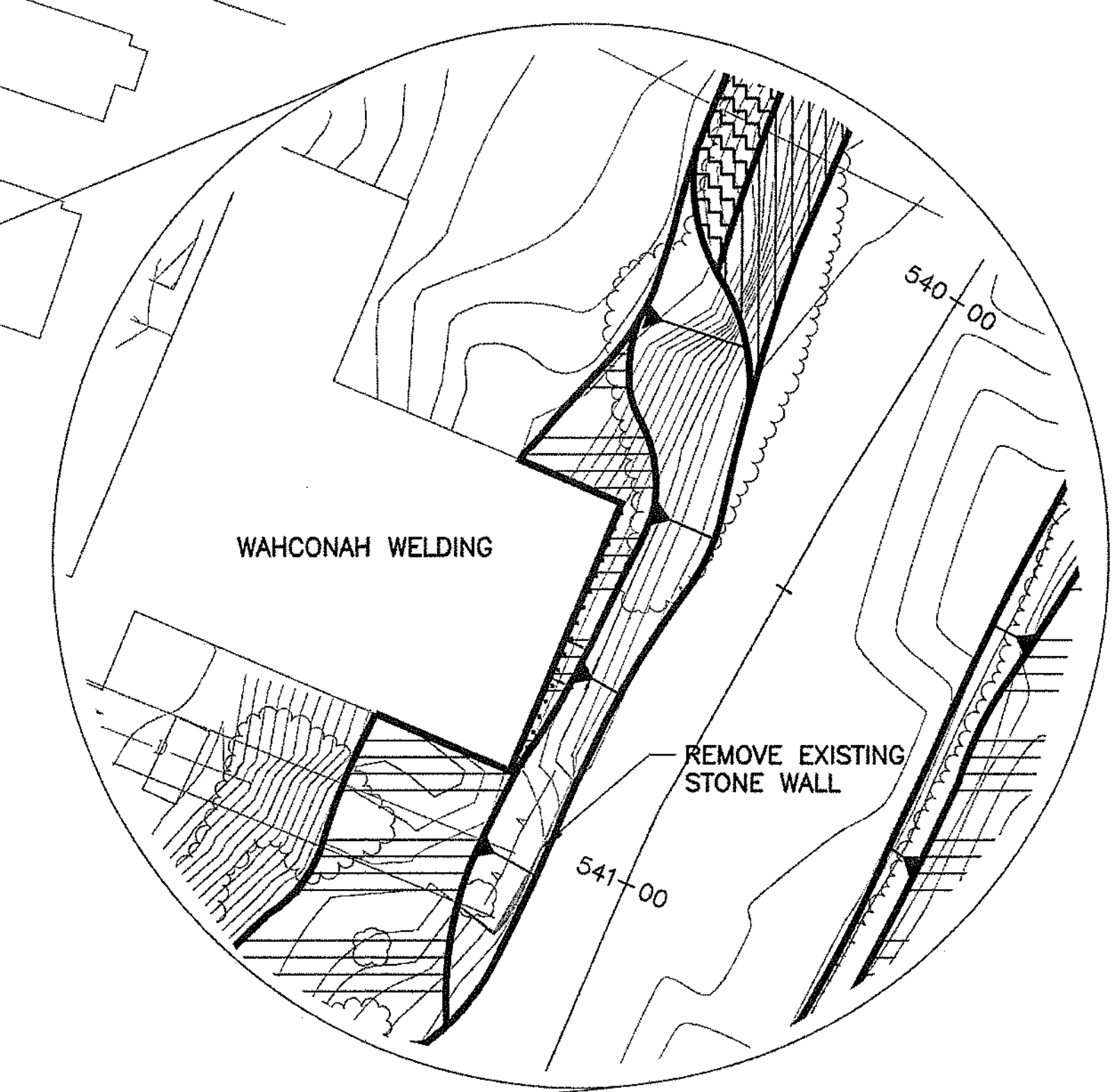
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| Design file no: | | | SPEC. No.: | |
| File name: Plot date: Plot scale: | | | | |






DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

WESTON
CONSULTANTS

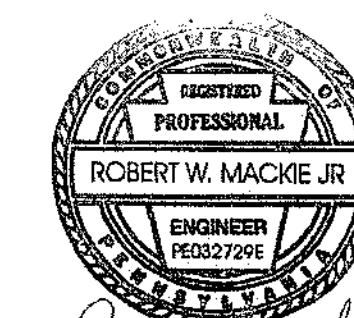
1.5 MILE REMEDIAL ACTION - PHASE II - STA 527+60 TO STA 543+50
ENVIRONMENTAL REMEDIATION CONTRACT (SSERC)
GE/HOUSATONIC RIVER SITE
PITTSFIELD, MASSACHUSETTS
GRADING PLAN
SHEET 1 OF 2

Sheet
reference
number:
2000
6 OF 17



- | | |
|---|-------------------------------------|
|  | 2H:1V |
|  | 1.5H:1V |
|  | MATCH EXISTING GRADE |
|  | GRADE - SLOPE FLATTER THAN 2H:1V |
|  | GEOCELL |


40 0 40 80 FEET
SCALE: 1"=40'



FINAL DESIGN SUBMITTAL

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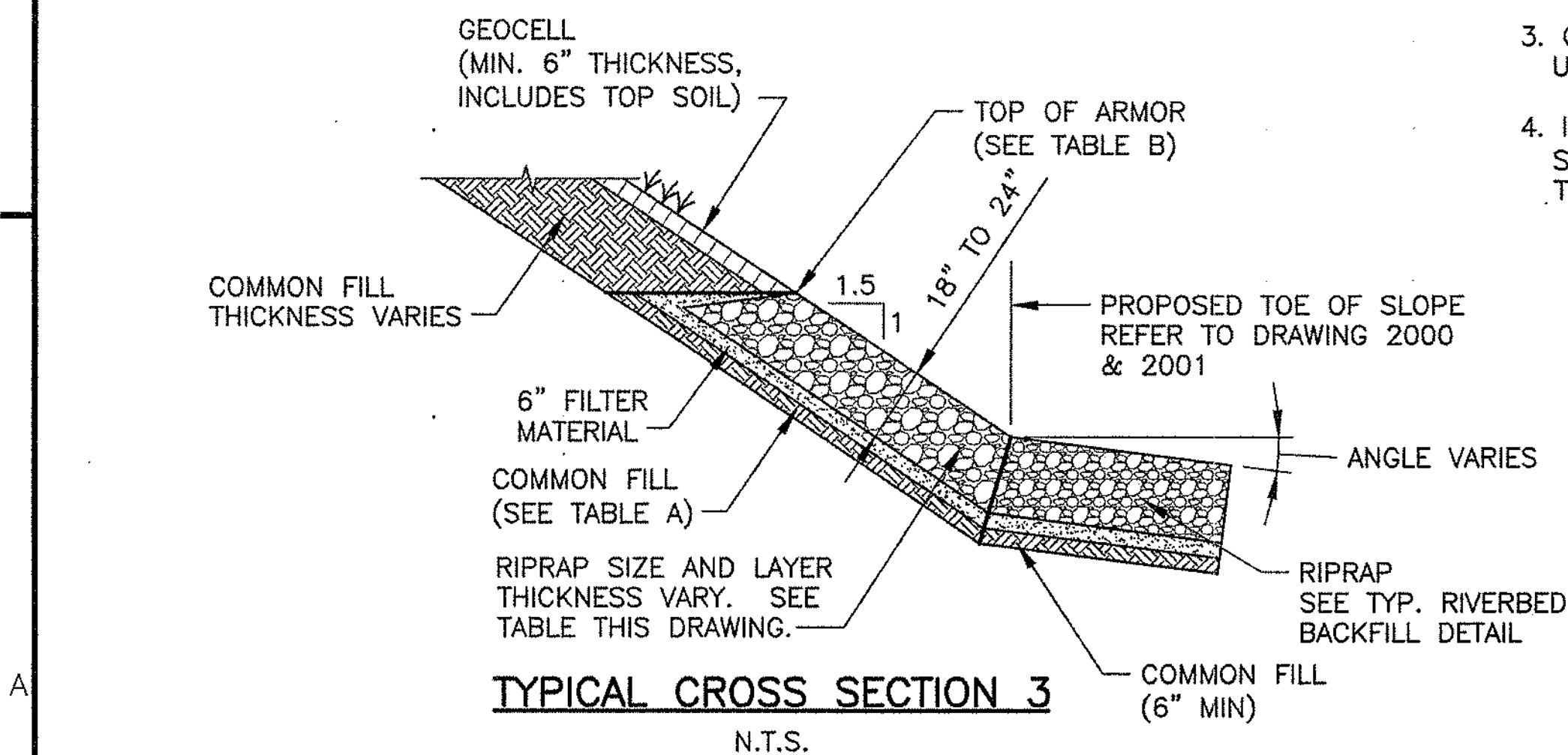
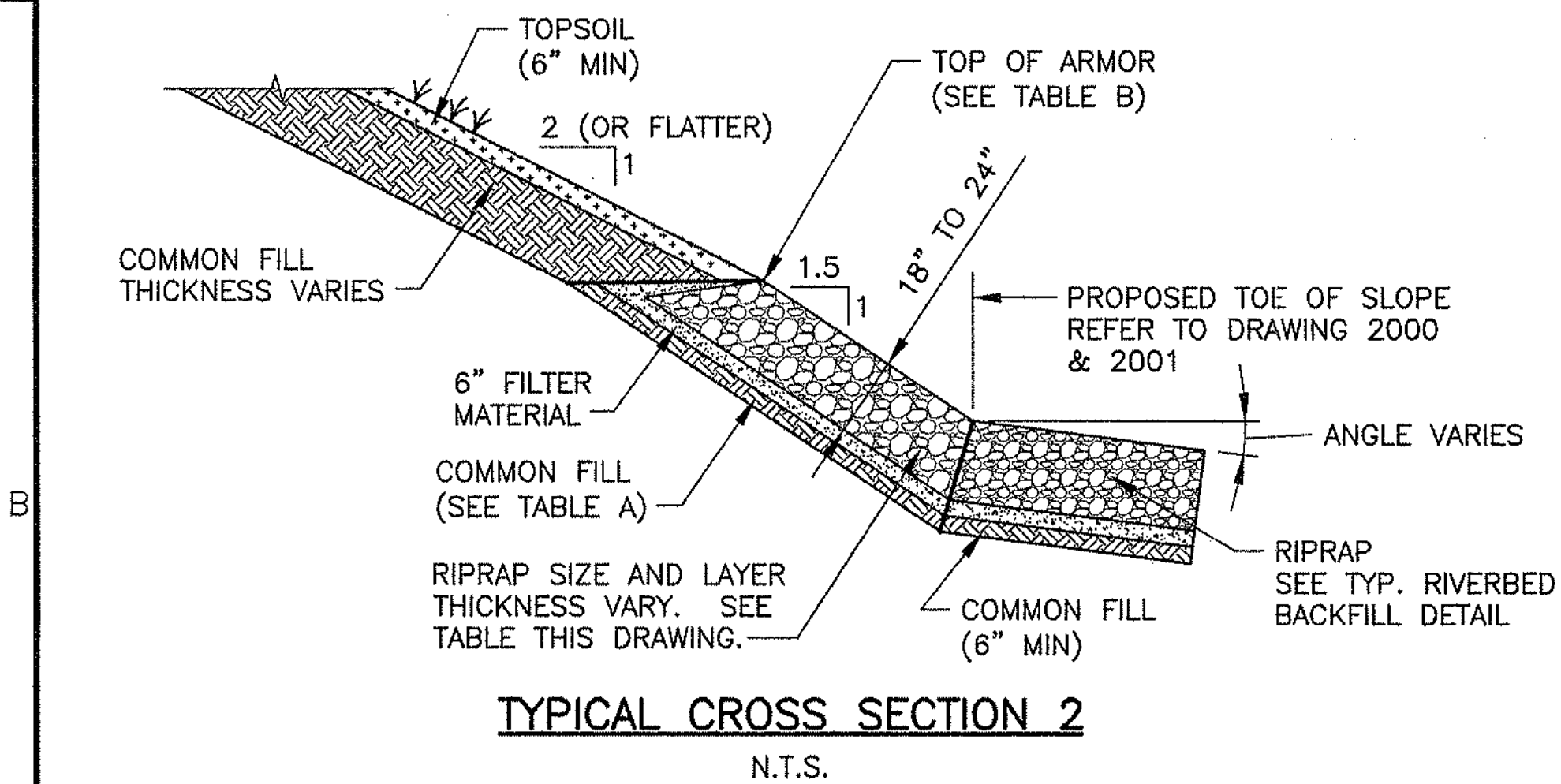
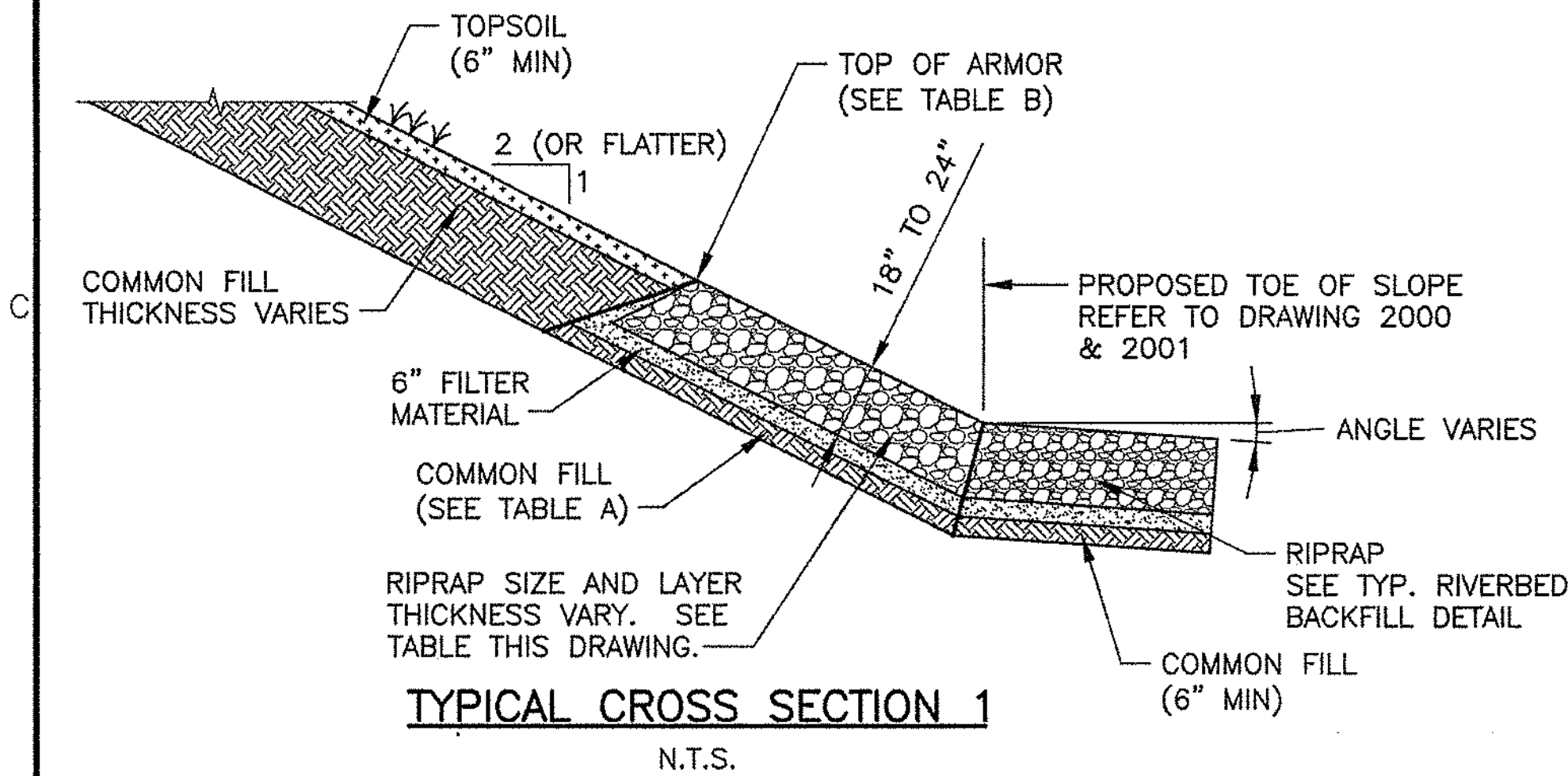
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| Reviewed by: | SPEC. No.: | |
| Submitted by: | File name: | Plot date: |
| Chief Arch. Section | Plot scale: | |

WESTON SOLUTIONS.  **WOODWARD CLARK**
ALTERNATIVE

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

ENVIRONMENTAL REMEDIATION CONTRACT (SSERC)
GE/HOUSATONIC RIVER SITE
PITTSFIELD, MASSACHUSETTS
GRADING PLAN
SHEET 2 OF 2

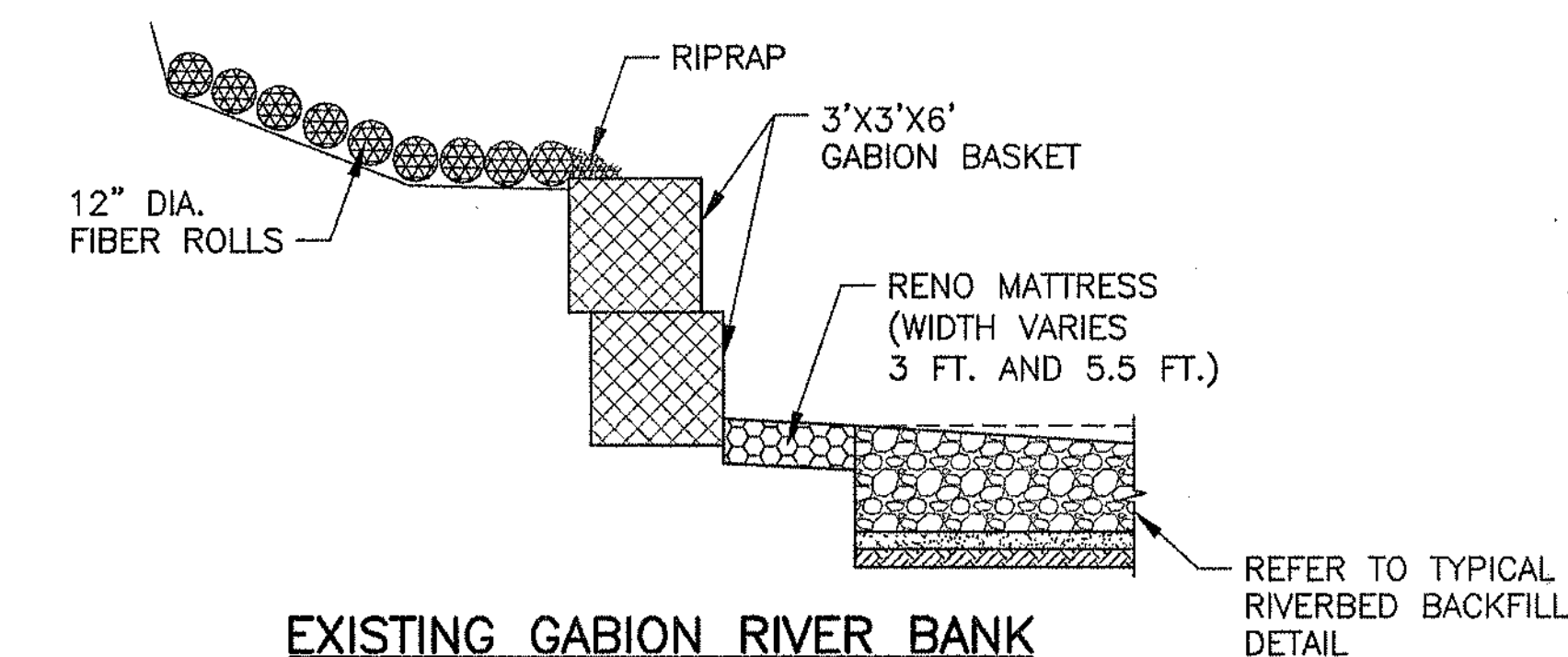
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reference
number:
0001
OF 17



- NOTES:
1. FINAL GRADES ARE HORIZONTAL TO VERTICAL (H:V).
 2. SEE SPECIFICATION 02300 FOR RIPRAP AND FILTER LAYER MATERIAL REQUIREMENTS.
 3. RIPRAP SHALL BE CONTINUOUS ACROSS RIVERBED UNLESS ROCK OUTCROPS ARE ENCOUNTERED IN WHICH CASE RIPRAP SHALL BE TRANSITIONED SMOOTHLY INTO BEDROCK OUTCROP.
 4. COMMON FILL THICKNESS BENEATH RIVERBANK RIP RAP SHALL BE AS INDICATED IN TABLE A. COMMON FILL THICKNESS BENEATH TOP SOIL SHALL BE AS REQUIRED TO ACHIEVE FINAL GRADE.

TABLE A: RIVERBANK BACKFILL REQUIREMENTS

| STATION | CROSS SECTION | RIPRAP | | FILTER MATERIAL | COMMON FILL |
|------------------|-------------------------|--------|-----------|-----------------|-------------|
| | | SIZE | THICKNESS | | |
| EAST | | | | | |
| 527+60 TO 529+75 | 1 | 12" | 18" | 6" | 0 |
| 529+75 TO 536+75 | 1 | 18" | 24" | 6" | 6" |
| 536+75 TO 538+35 | 3 | 18" | 24" | 6" | 6" |
| 538+35 TO 543+50 | 1 | 18" | 24" | 6" | 6" |
| WEST | | | | | |
| 527+60 TO 529+60 | 1 | 12" | 18" | 6" | 0 |
| 528+60 TO 529+40 | 2 | 12" | 18" | 6" | 0 |
| 529+40 TO 529+60 | 1 | 12" | 18" | 6" | 0 |
| 529+60 TO 531+40 | 2 | 12" | 18" | 6" | 0 |
| 531+40 TO 533+50 | 1 | 12" | 18" | 6" | 0 |
| 533+50 TO 534+50 | 1 | 18" | 24" | 6" | 6" |
| 534+50 TO 539+00 | EXISTING GABION BASKETS | | | | |
| 539+00 TO 540+00 | 3 | 18" | 24" | 6" | 6" |
| 540+00 TO 543+50 | 1 | 18" | 24" | 6" | 6" |



NOTES:

1. EXISTING SINGLE GABION BASKETS INSTALLED AT SOME LOCATIONS.
2. RENO MATTRESS INSTALLED WITHOUT GABION BASKETS, FROM STA. 536+50 TO STA. 537+00 AND STA. 537+50 TO STA. 538+00
3. COMPLETE WORK IN A MANNER THAT MINIMIZES THE POTENTIAL OF UNDERMINING MATTRESSES.
4. IF UNDERMINING OCCURS DURING EXCAVATION THE EXCAVATION SUBCONTRACTOR SHALL PLACE 12" RIPRAP (OR GROUT) UNDER THE EDGE OF THE MATTRESSES TO PREVENT FUTURE UNDERMINING AND TO STABILIZE THE MATTRESSES.

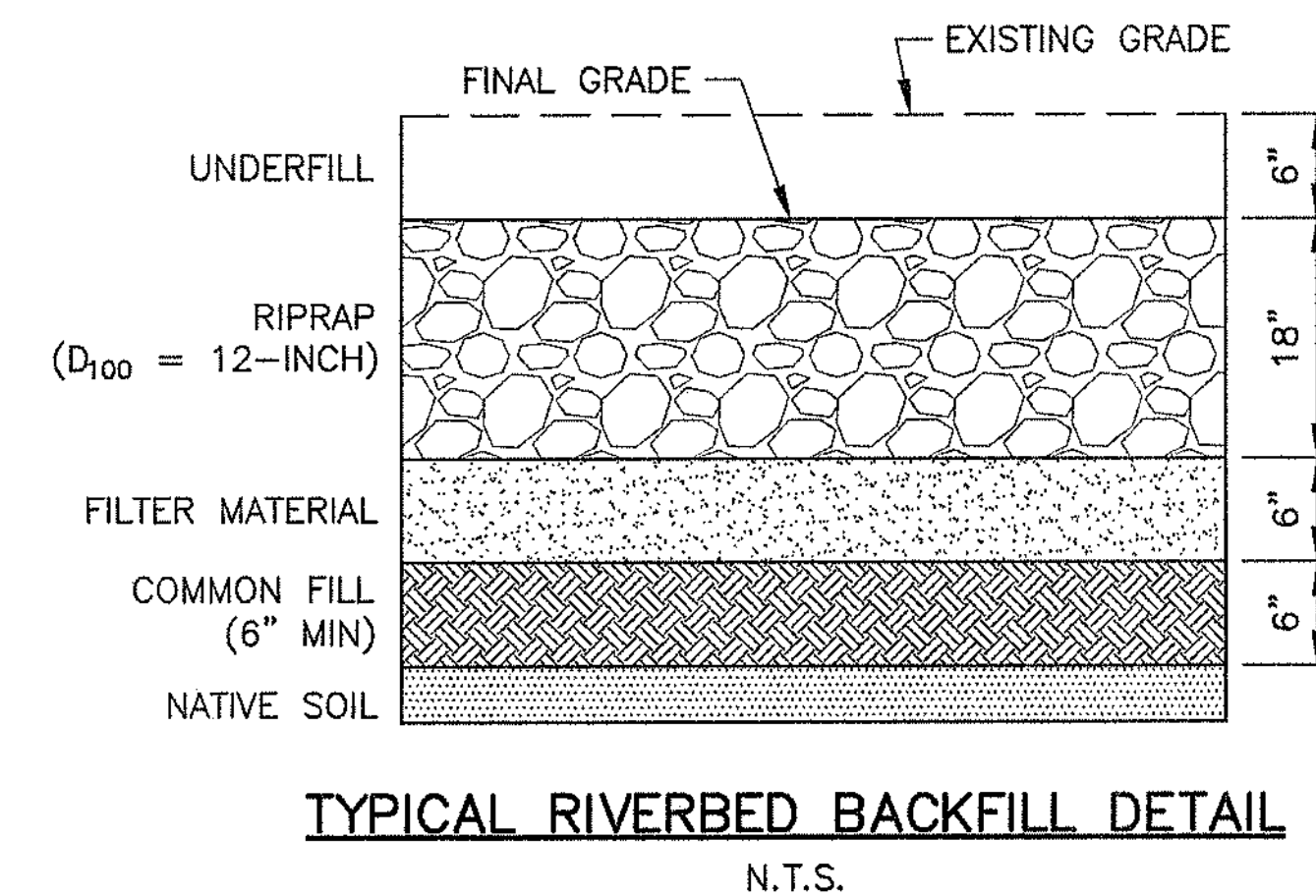
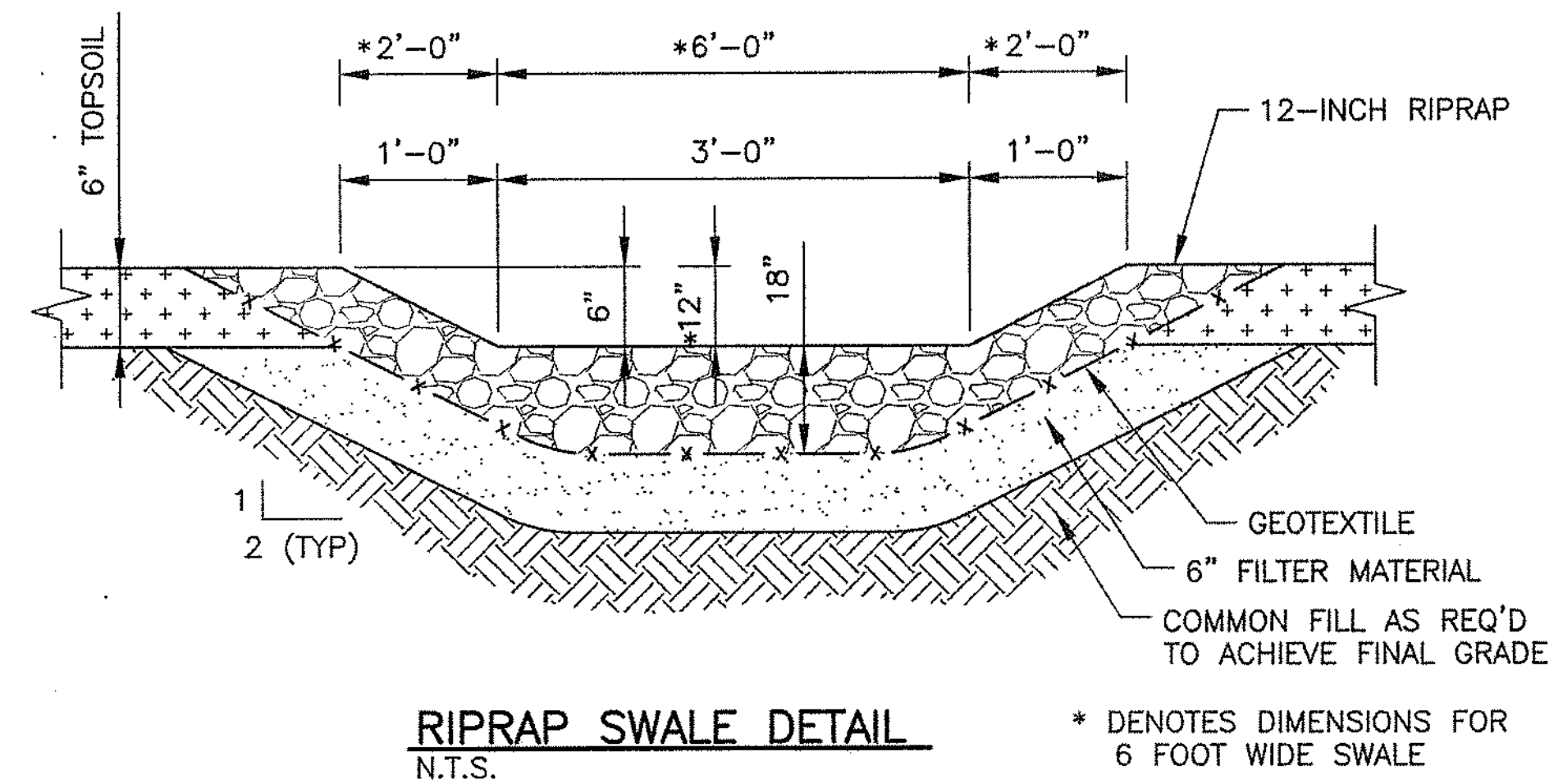
TABLE B: TOP OF RIPRAP ARMOR ELEVATIONS

| STATION | TOP OF ARMOR ELEV. |
|---------|--------------------|
| 527+60 | 972.0 |
| 530+00 | 971.5 |
| 532+00 | 971.0 |
| 534+00 | 970.5 |
| 536+00 | 970.0 |
| 538+00 | 969.5 |
| 540+00 | 969.0 |
| 543+50 | 968.2 |

NOTE:

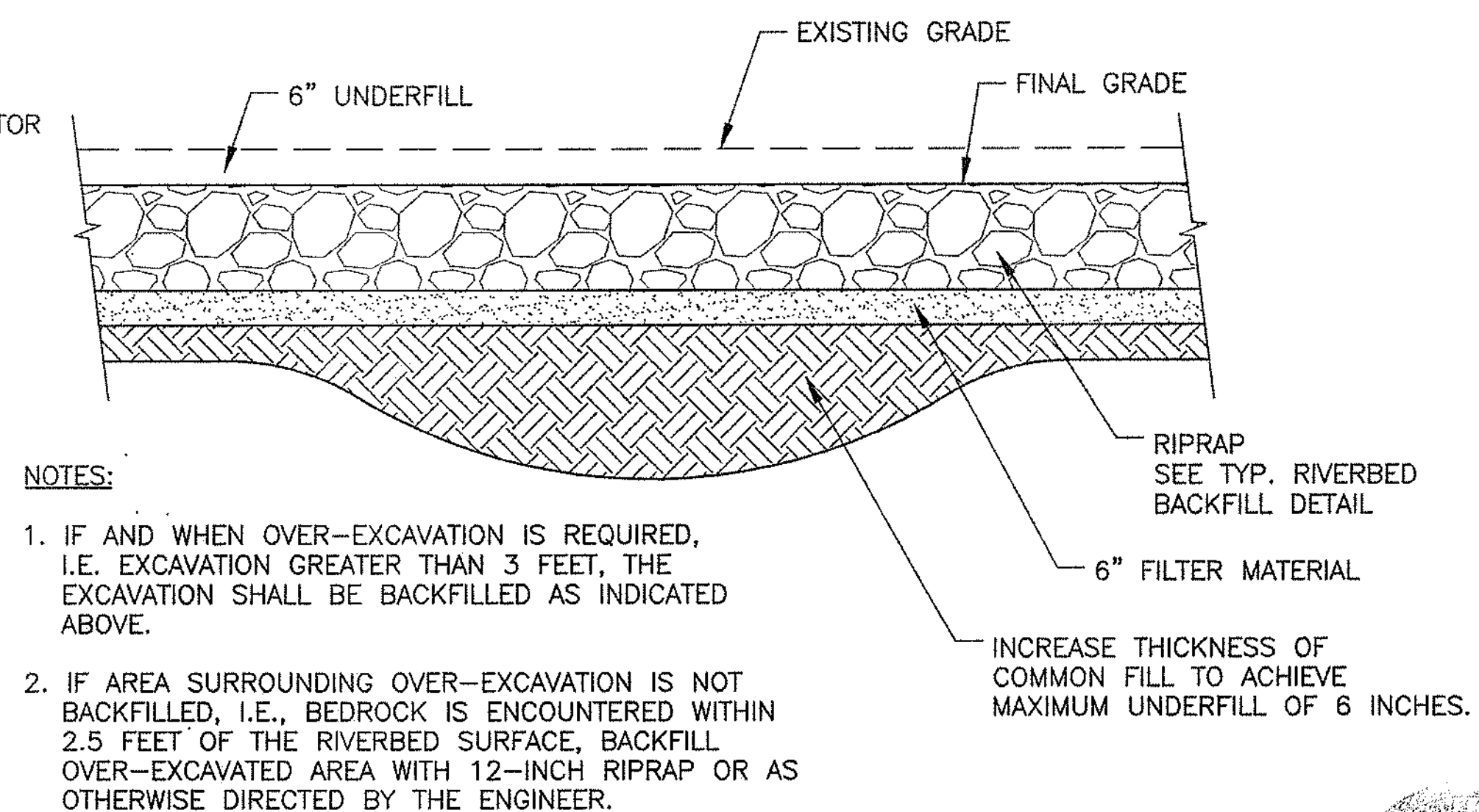
1. ABOVE ELEVATIONS REPRESENT MINIMUM TOP OF RIPRAP ARMOR ELEVATIONS WHICH MUST BE ACHIEVED ON THE RIVERBANK AT THE RESPECTIVE STATIONS. SEE CROSS SECTIONS FOR TOP OF RIPRAP ELEVATIONS AT INTERMEDIATE STATIONS. EXCAVATION SUBCONTRACTOR TO MAKE AS SMOOTH A TRANSITION AS PRACTICAL IN TOP OF RIVERBANK RIPRAP ELEVATION BETWEEN STATIONS.

2. WITHIN BRIDGE OPENING PLACE RIPRAP TO EXISTING GRADE (+0,-6")



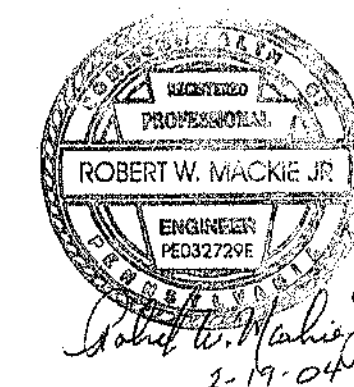
NOTES:

1. IF BEDROCK IS ENCOUNTERED WITHIN 2.5 FEET OF THE EXISTING RIVERBED SURFACE, BACKFILLING IS NOT REQUIRED, UNLESS DIRECTED BY THE ENGINEER.
2. RIVERBED BACKFILL CROSS SECTION SHALL BE EXTENDED TO STA. 543+50.



NOTES:

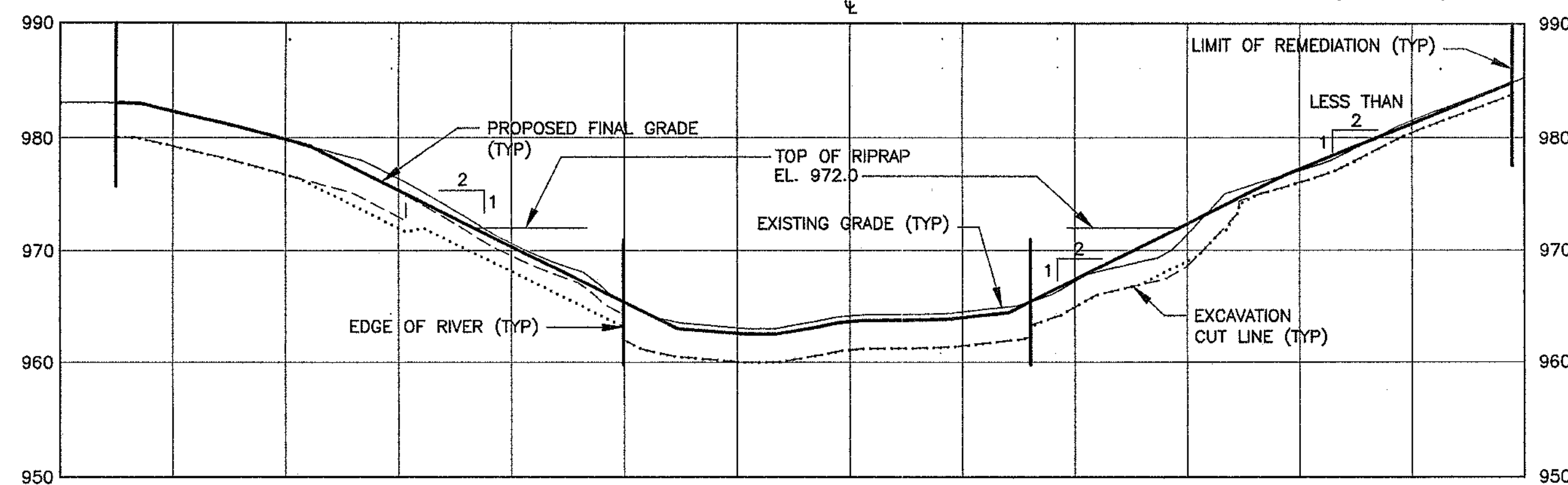
1. IF AND WHEN OVER-EXCAVATION IS REQUIRED, I.E. EXCAVATION GREATER THAN 3 FEET, THE EXCAVATION SHALL BE BACKFILLED AS INDICATED ABOVE.
2. IF AREA SURROUNDING OVER-EXCAVATION IS NOT BACKFILLED, I.E., BEDROCK IS ENCOUNTERED WITHIN 2.5 FEET OF THE RIVERBED SURFACE, BACKFILL OVER-EXCAVATED AREA WITH 12-INCH RIPRAP OR AS OTHERWISE DIRECTED BY THE ENGINEER.



**Due to the removal of selected features from the Draft Design for Phase 2,
Stations 527+60 to 543+50, Drawings 9 through 11 are not included
in this Final Drawings package**

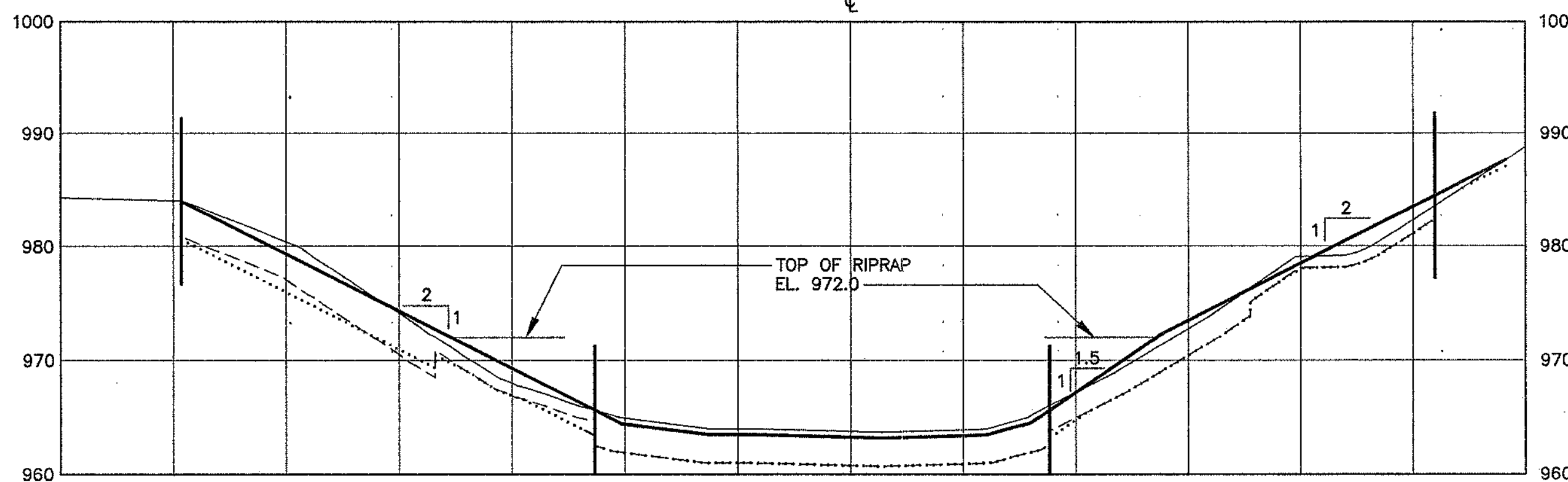
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(RIGHT) WEST



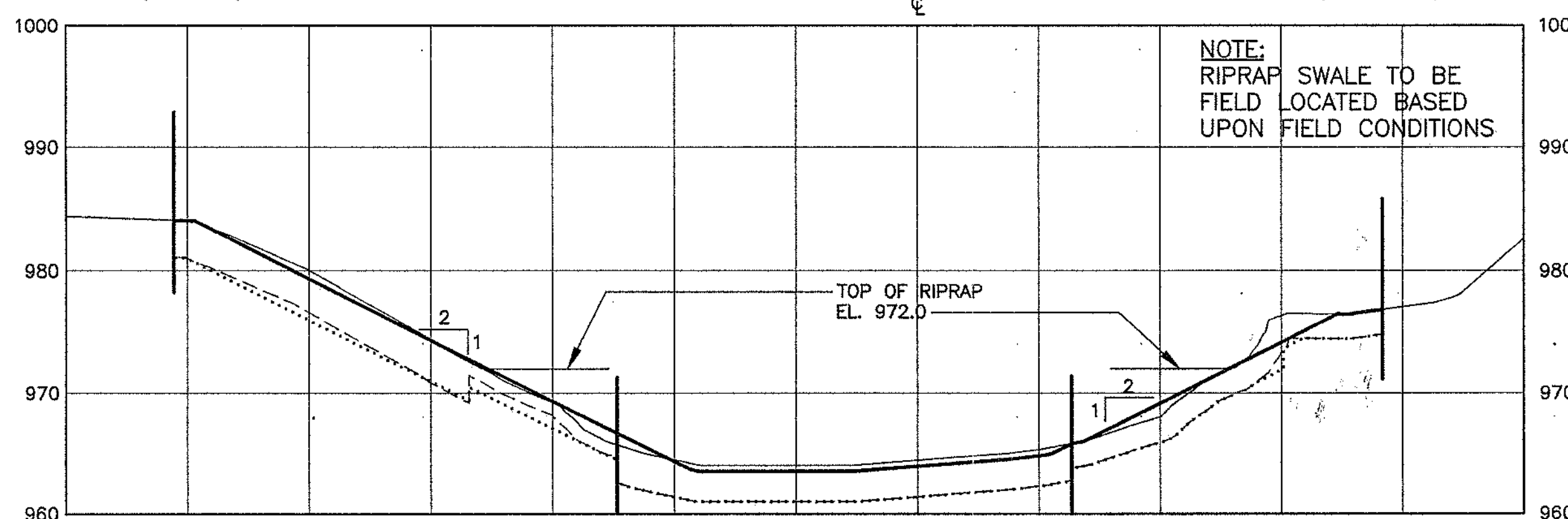
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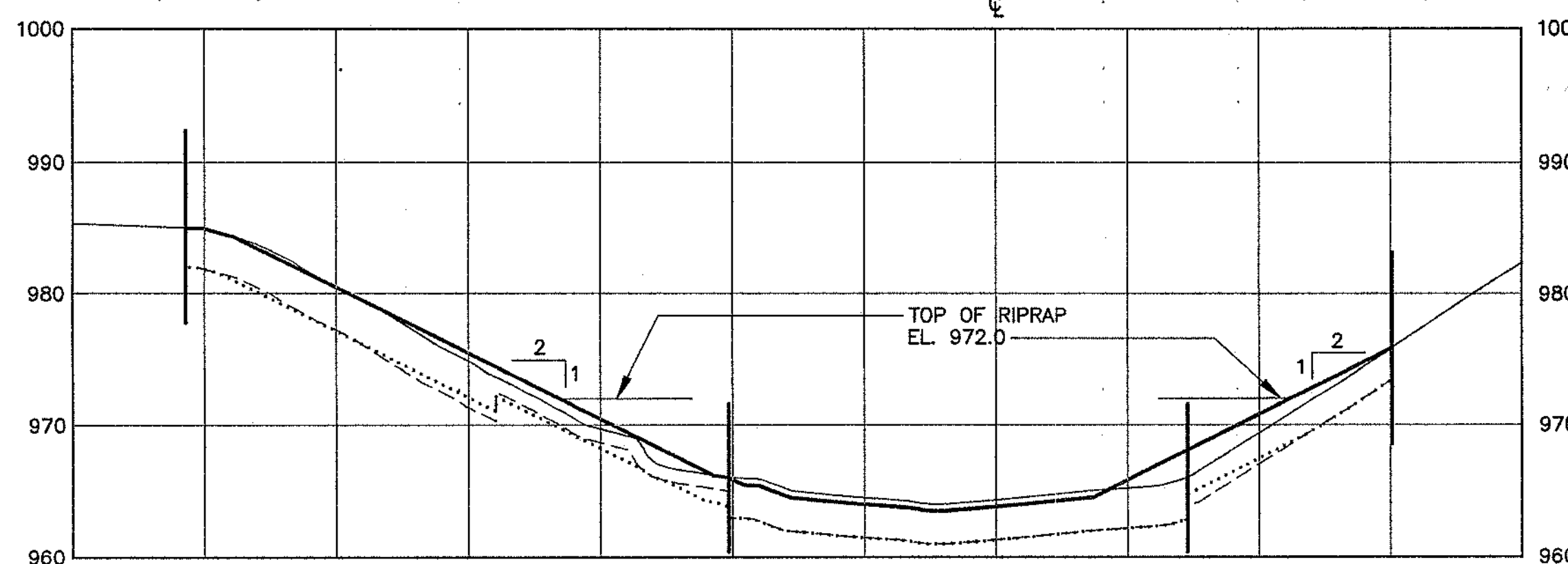
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(RIGHT) WEST



EAST (LEFT)

(RIGHT) WEST



LEGEND

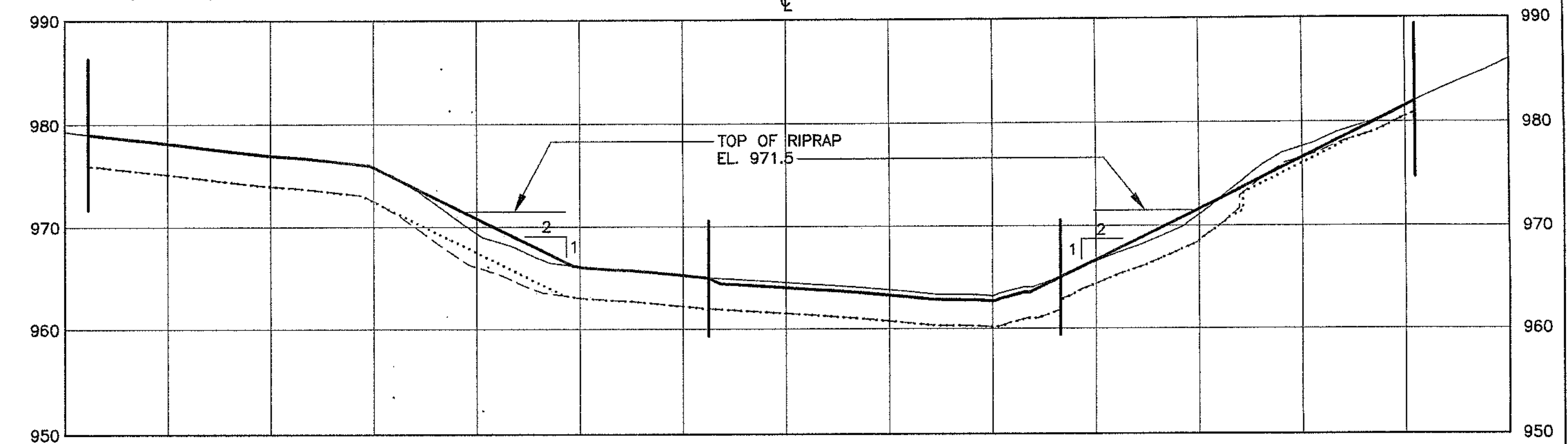
- EXISTING GRADE
- FINAL GRADE
- - - - - DEPTH OF CONTAMINATION
- EXCAVATION CUT LINE

NOTE:

1. MATCH EXISTING GRADE UNLESS OTHERWISE NOTED.
2. MAXIMUM ALLOWABLE SLOPE IS 2H:1V, UNLESS OTHERWISE NOTED.
3. SLOPE INCLINATION FOR GEOCELL SHALL NOT EXCEED 1.5:1.
4. RIPRAP SHALL BE PLACED TO THE ELEVATION OF THE BREAK IN SLOPE WHEN THE SLOPE CHANGES FROM 1.5:1 BELOW THE BREAK TO 2:1 ABOVE THE BREAK. IF THERE IS NO BREAK IN SLOPE, RIPRAP SHALL EXTEND UP THE RIVER BANK TO THE MINIMUM ELEVATION AS INDICATED AT EACH SECTION.

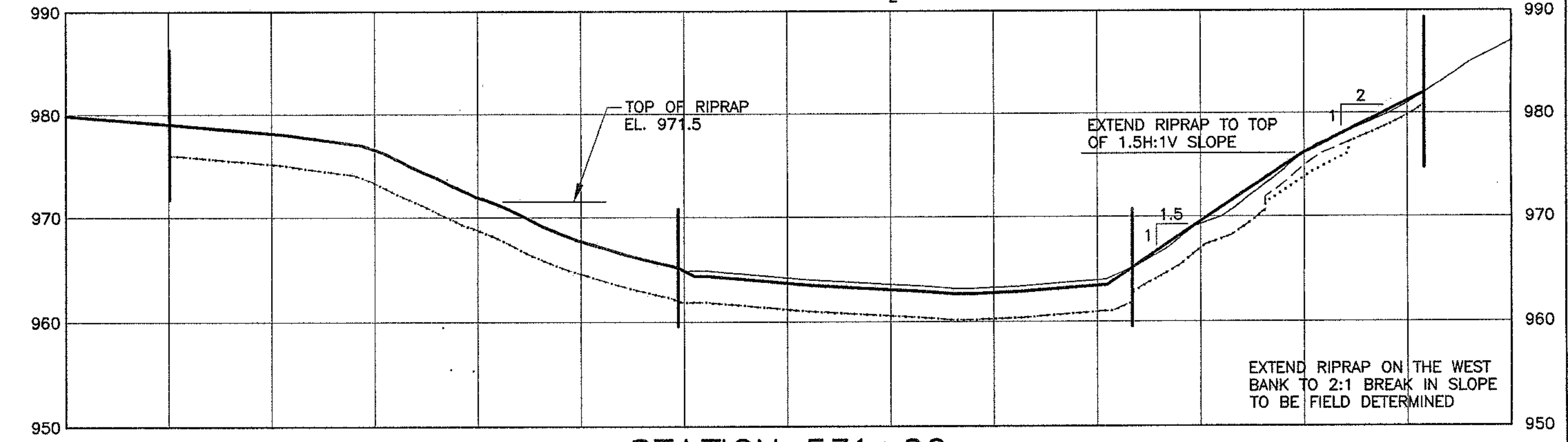
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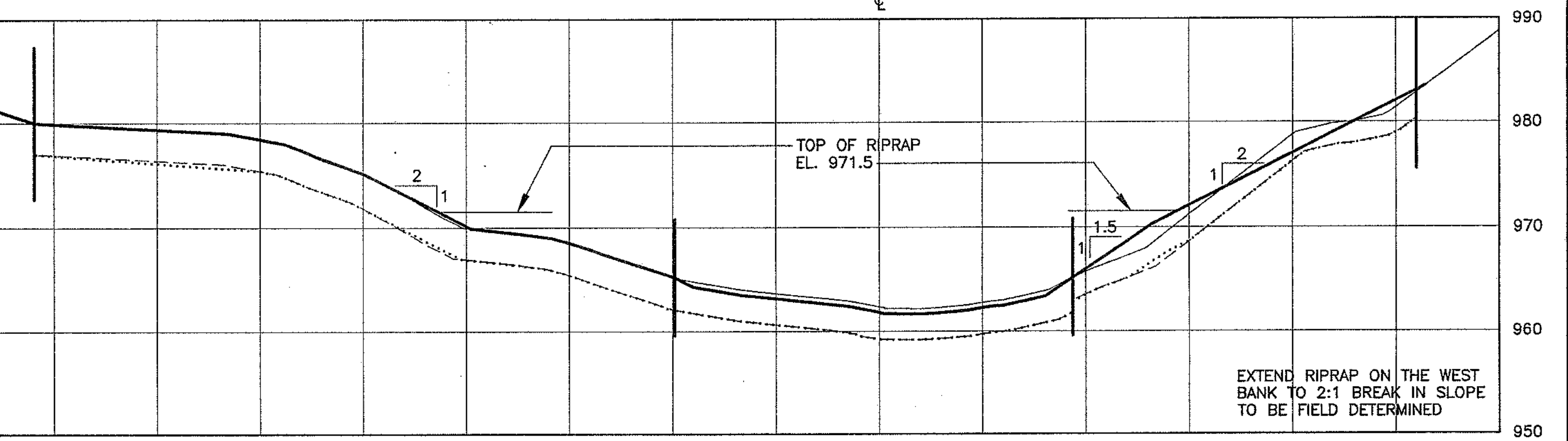
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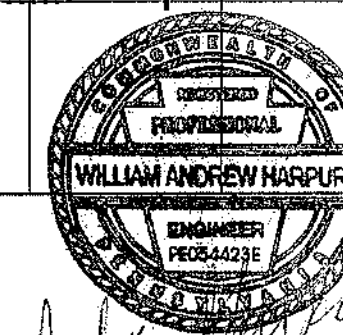
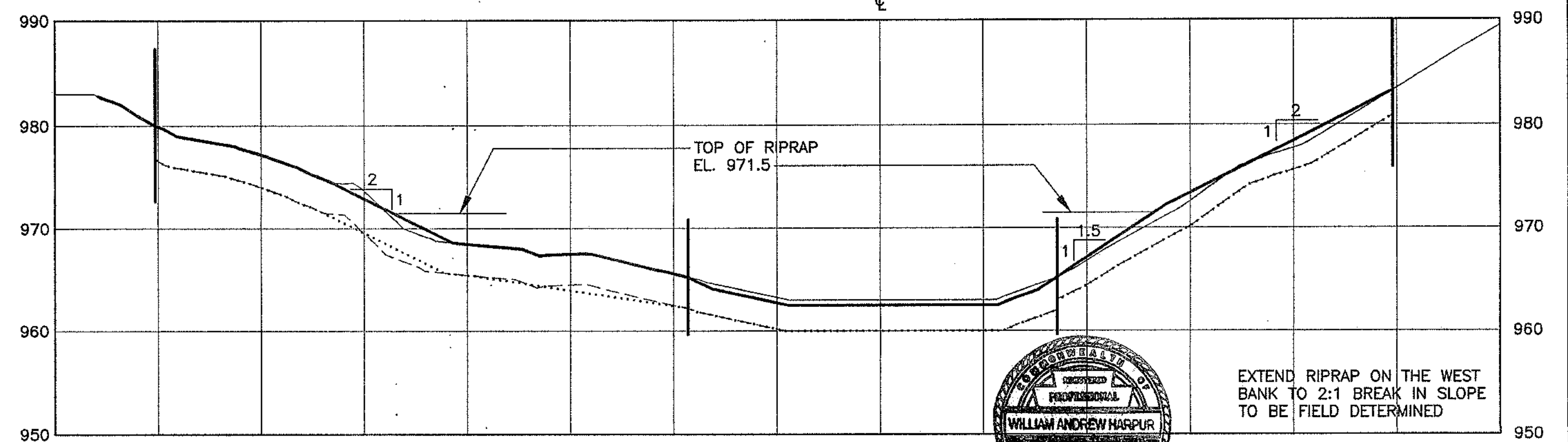
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EAST (LEFT)

(RIGHT) WEST



2-18-04

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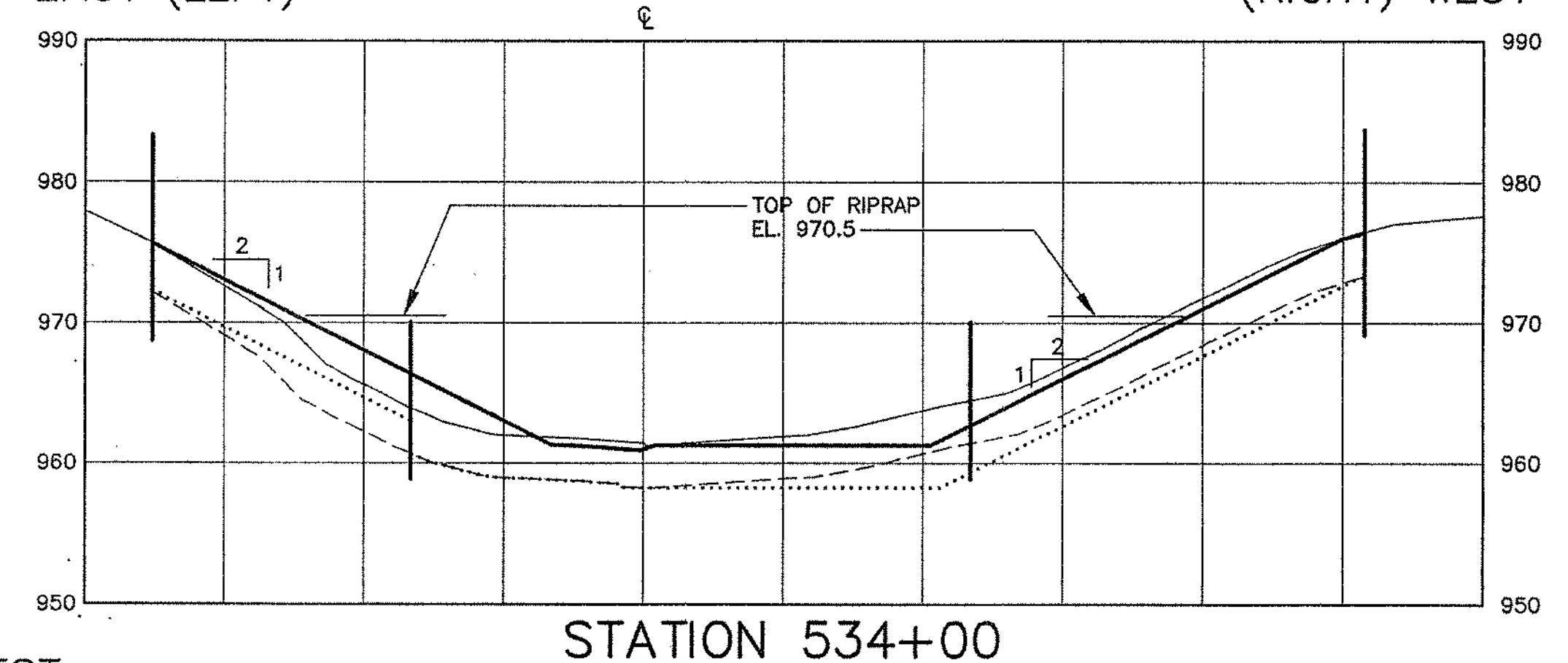
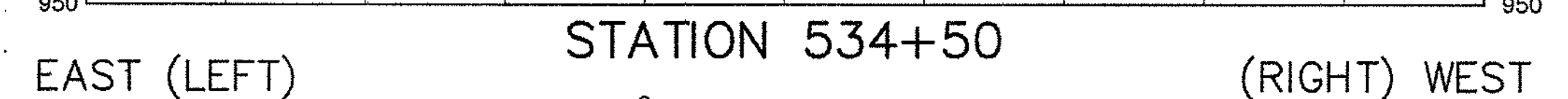
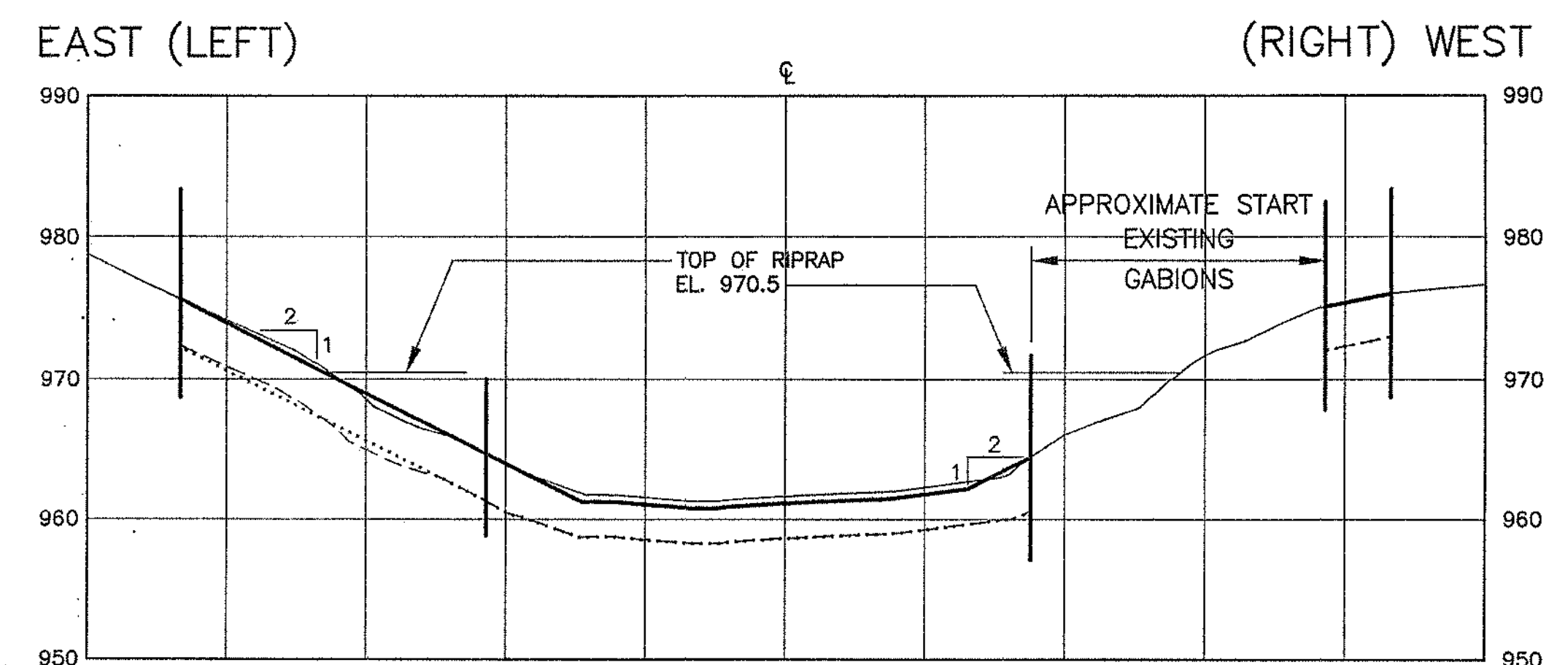
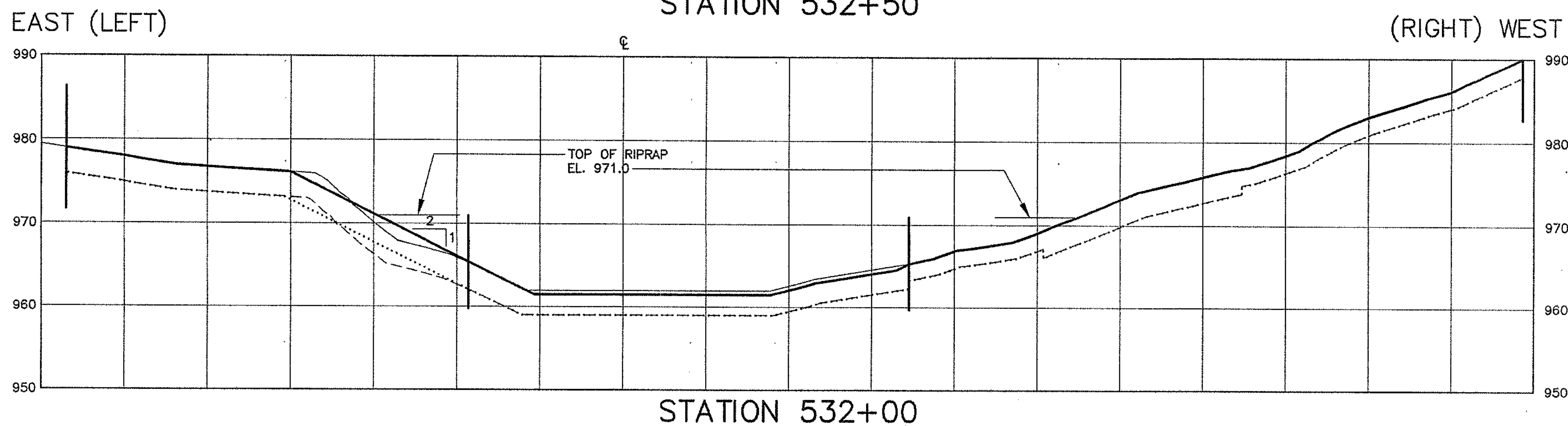
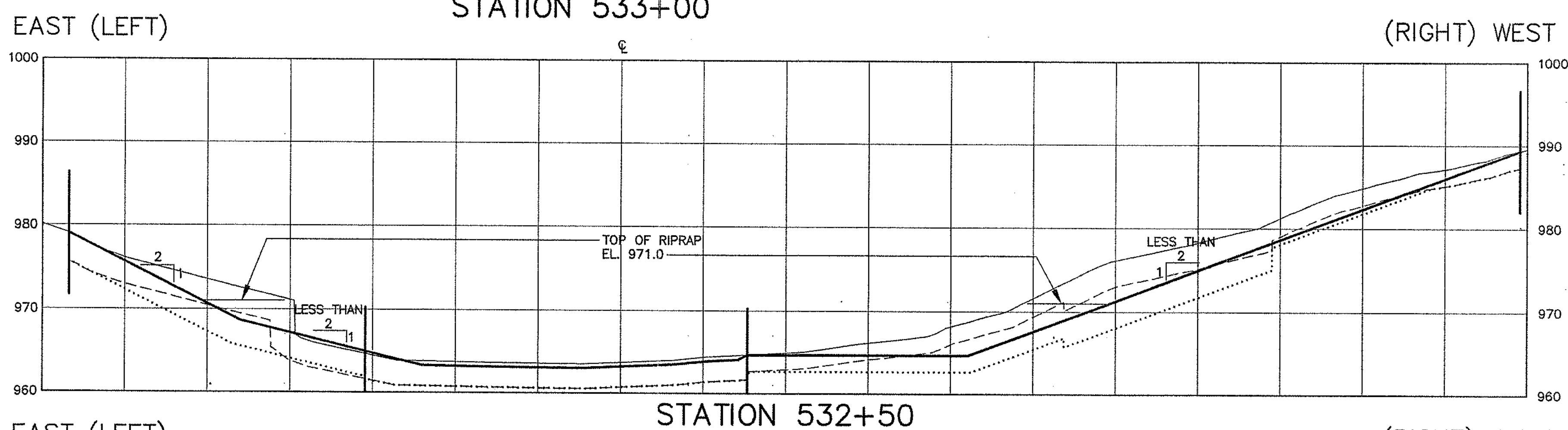
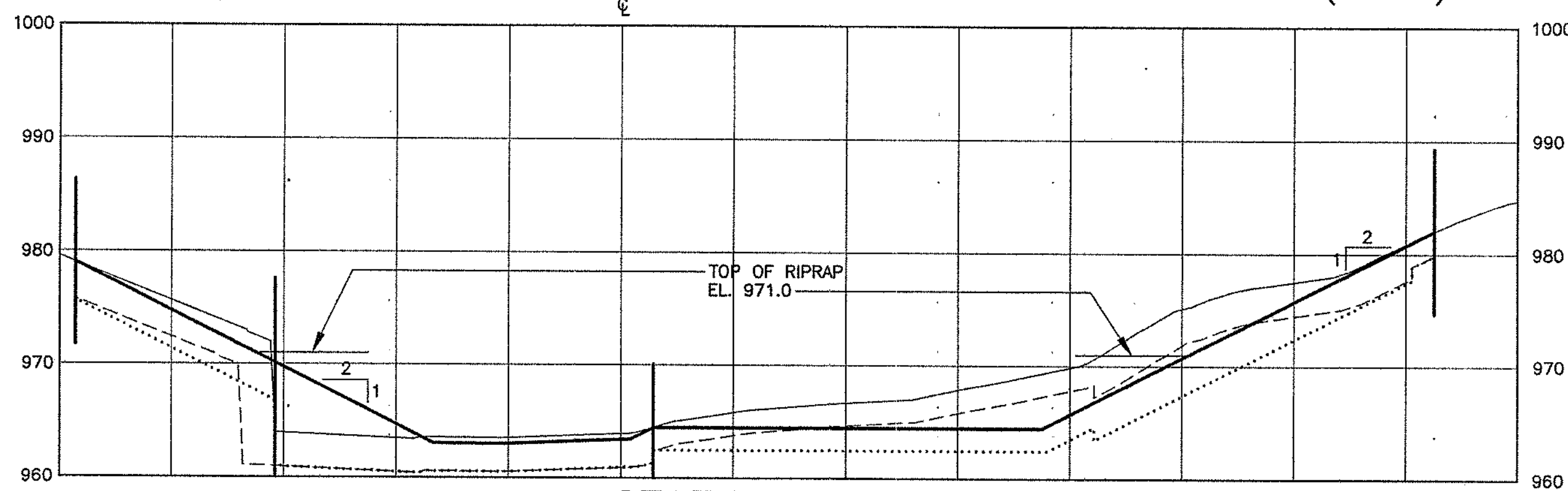
US Army Corps
of Engineers
New England District

| Rev. | Date | By | Description |
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| A | 10/24/03 | TJDELANO | DRAFT DESIGN SUBMITTAL |

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| Drawn by: | EDIFATA | Design file no: | | Spec. No.: | |
| Submitted by: | | File name: | 2005-2010 | Plot scale: | AS SHOWN |
| Chief, Arch. Section | | Plot scale: | AS SHOWN | | |

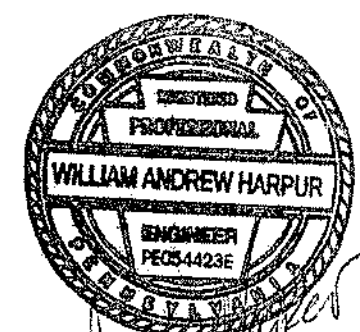
1.5 MILE REMEDIAL ACTION - PHASE 2 - STA 527+60 TO STA 543+60
ENVIRONMENTAL REMEDIATION CONTRACT (SSRC)
GE/HOUSATONIC RIVER SITE
PITTSFIELD, MASSACHUSETTS
CROSS SECTIONS
SHEET 1 OF 5

Sheet
reference
number:
2006
12 OF 17

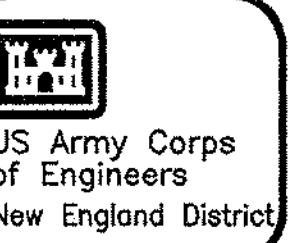


----- EXISTING GRADE
----- FINAL GRADE
- - - - - DEPTH OF CONTAMINATION
..... EXCAVATION CUT LINE


1. MATCH EXISTING GRADE UNLESS OTHERWISE NOTED.
2. MAXIMUM ALLOWABLE SLOPE IS 2H:1V, UNLESS OTHERWISE NOTED.
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4. RIPRAP SHALL BE PLACED TO THE ELEVATION OF THE BREAK IN SLOPE WHEN THE SLOPE CHANGES FROM 1.5:1 BELOW THE BREAK TO 2:1 ABOVE THE BREAK. IF THERE IS NO BREAK IN SLOPE, RIPRAP SHALL EXTEND UP THE RIVER BANK TO THE MINIMUM ELEVATION AS INDICATED AT EACH SECTION.



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| Reviewed by: | | SPEC. No.: |
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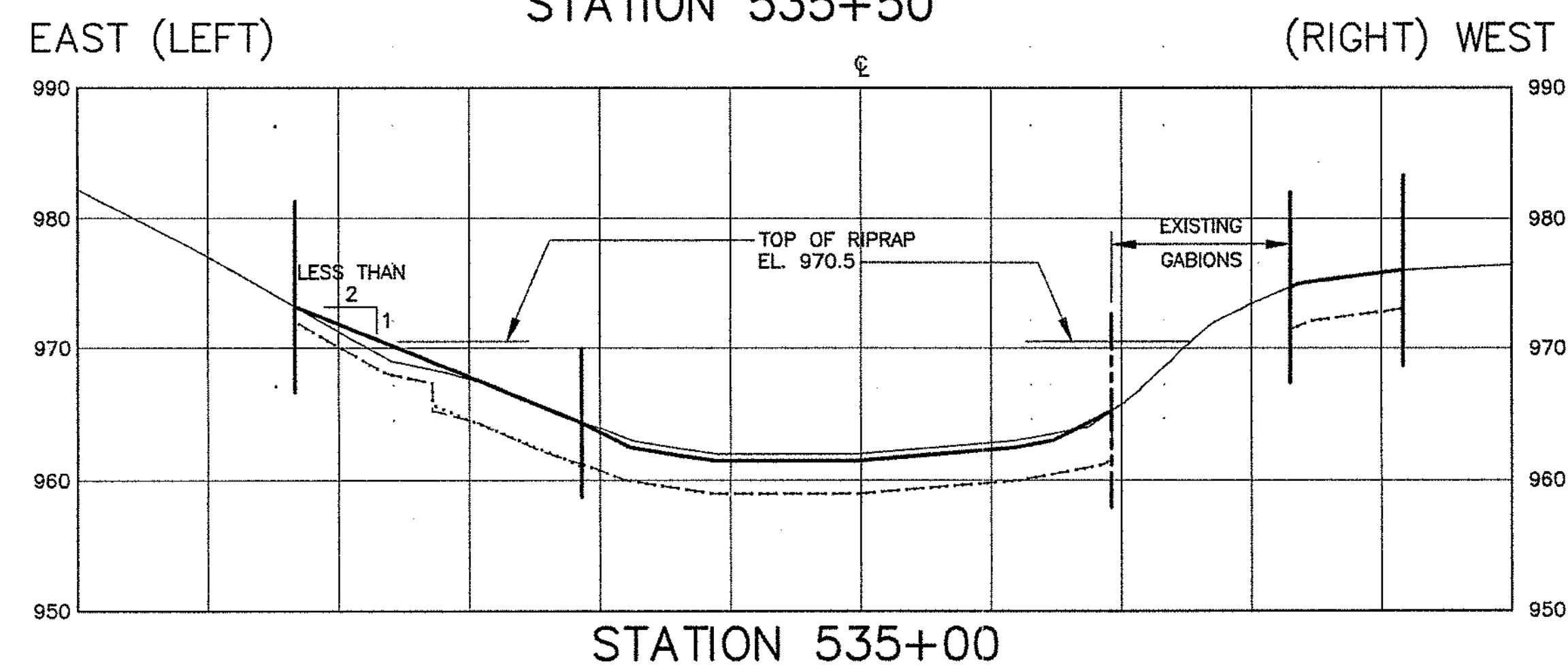
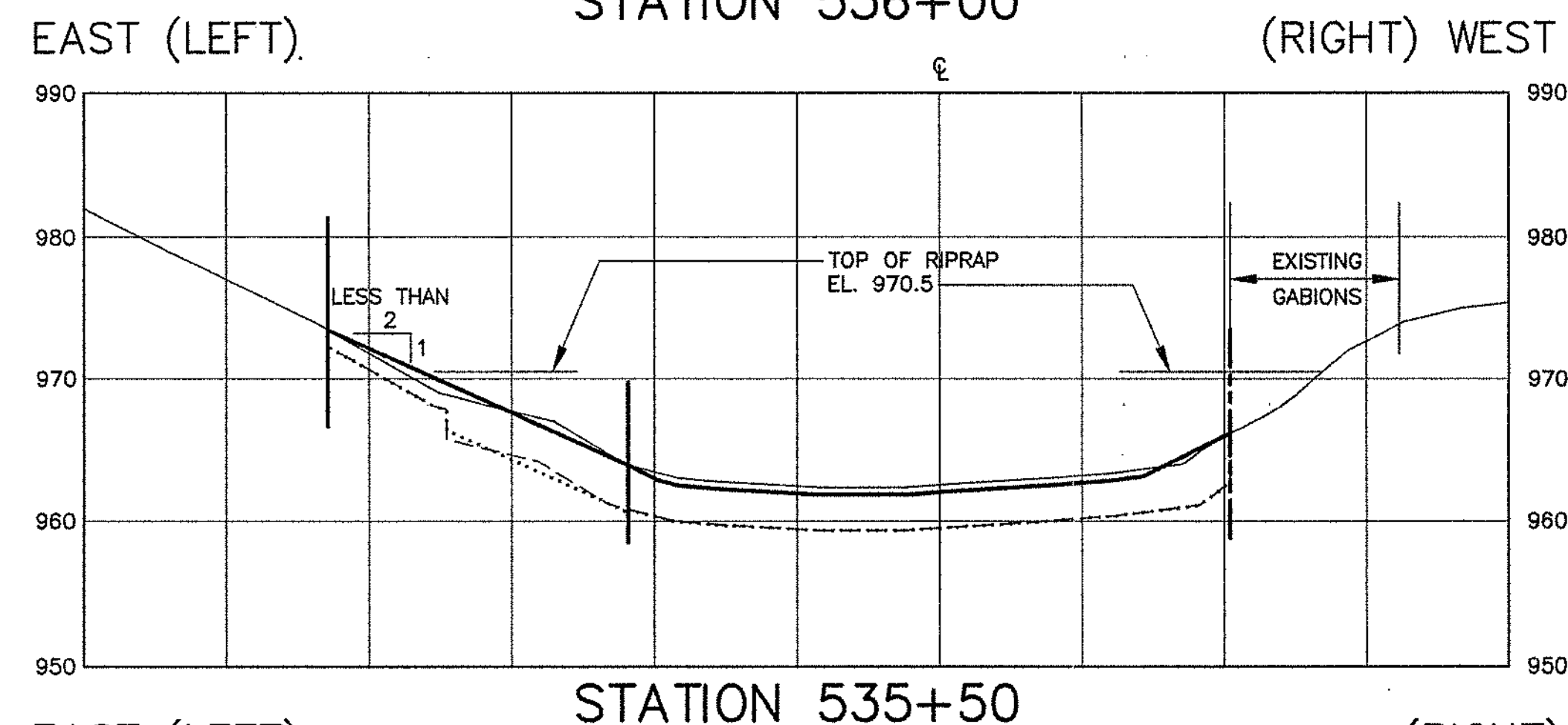
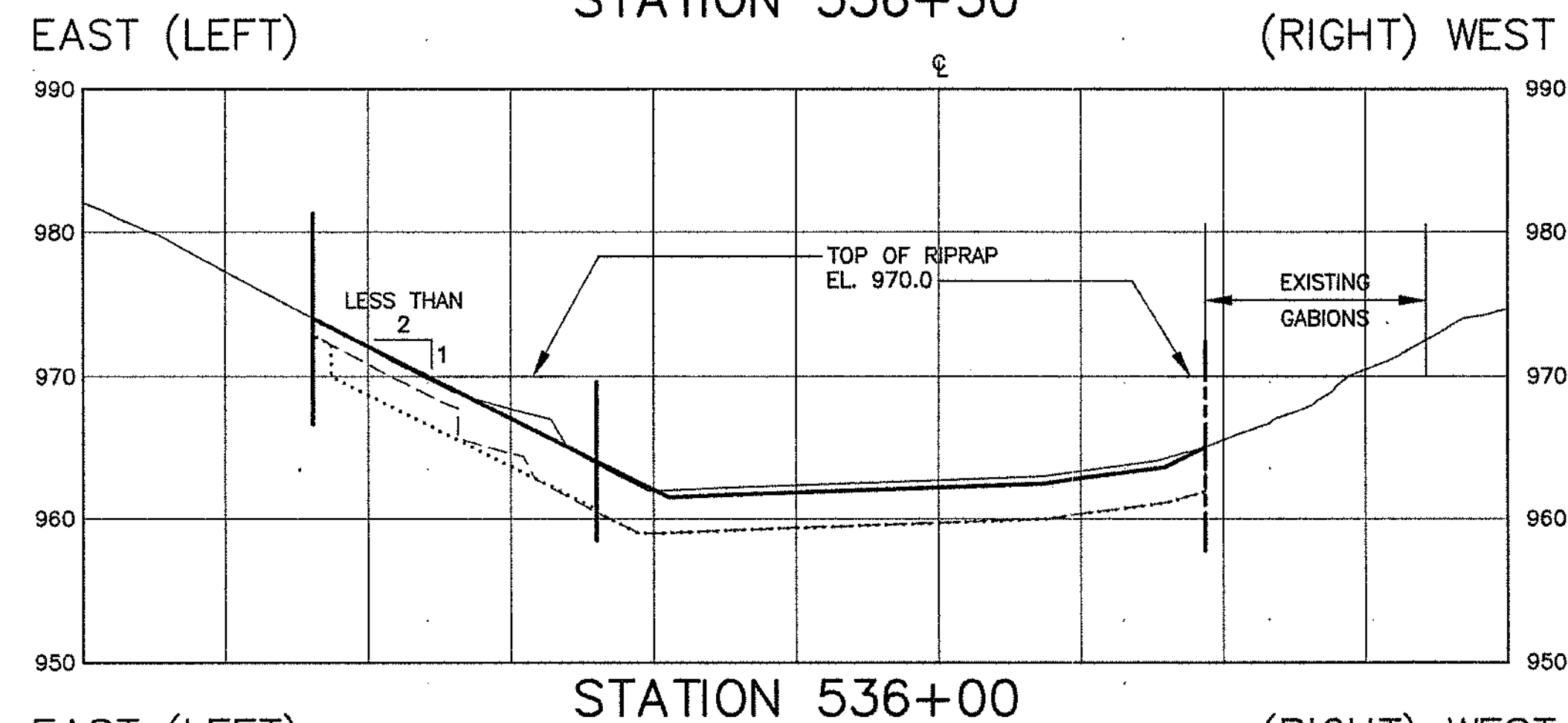
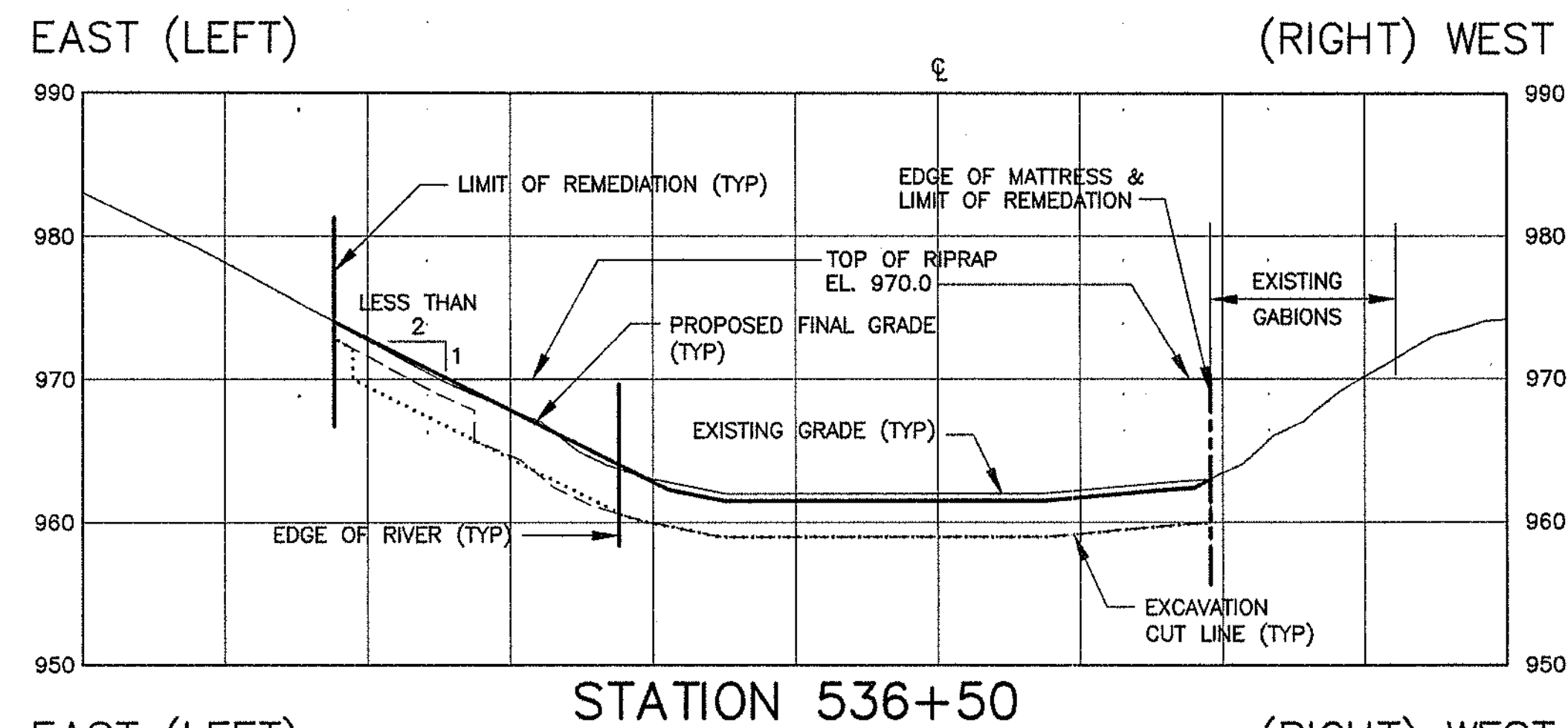
WESTON SOLUTIONS.
 **WOODWARD**
 ALTERNATIVE

ENVIRONMENTAL REMEDIATION CONTRACT (SSERC)
GE/HOUSATONIC RIVER SITE
PITTSFIELD, MASSACHUSETTS

CROSS SECTIONS
SHEET 2 OF 5

Sheet
reference
number:

2007
13 OF 17

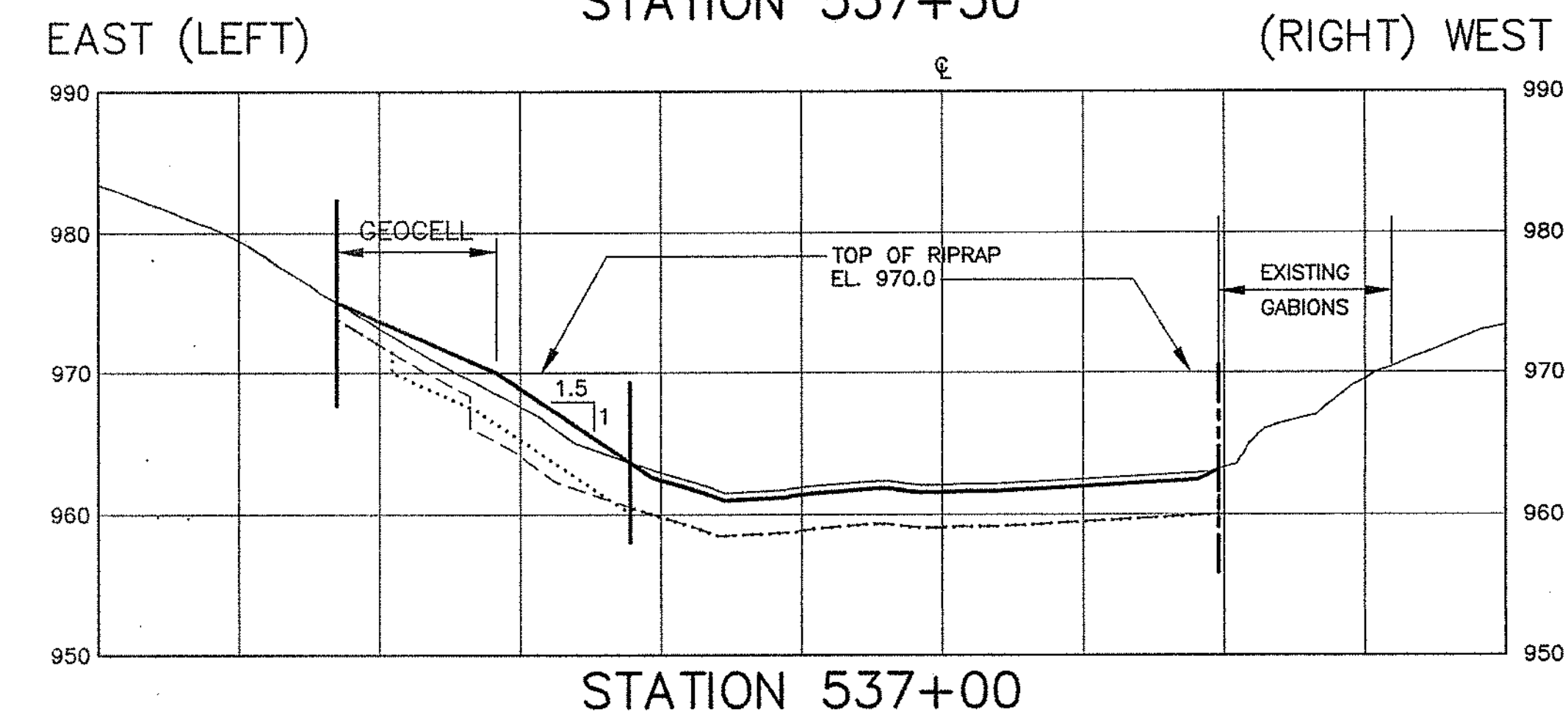
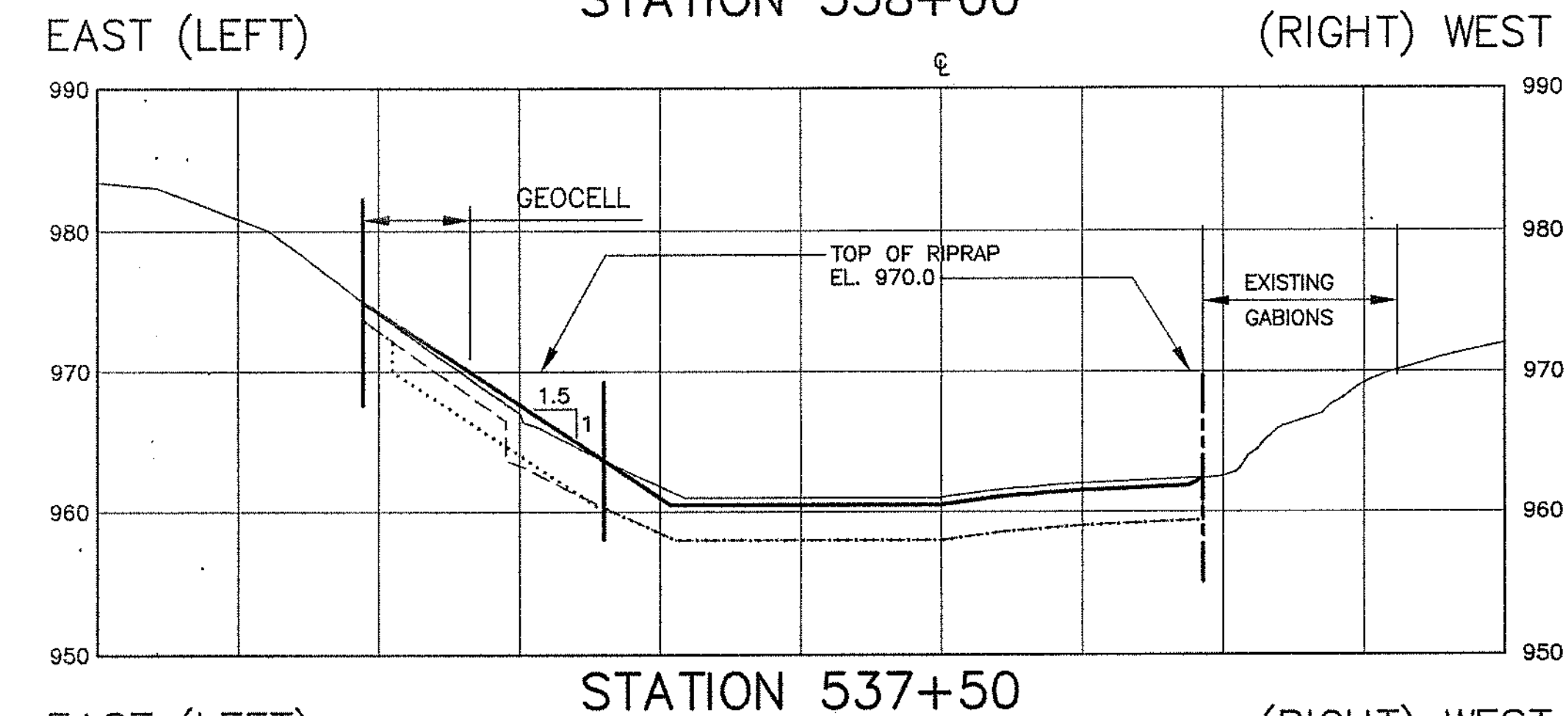
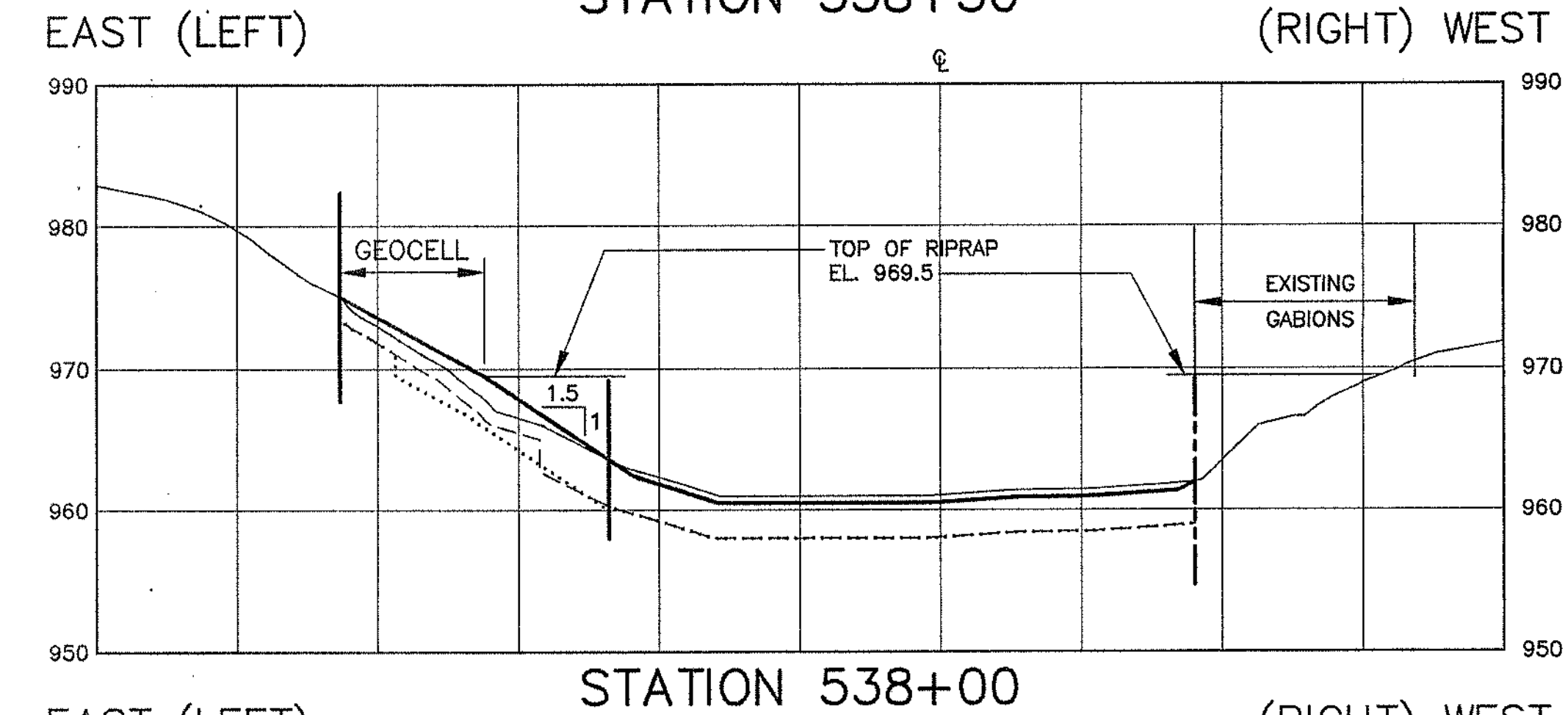
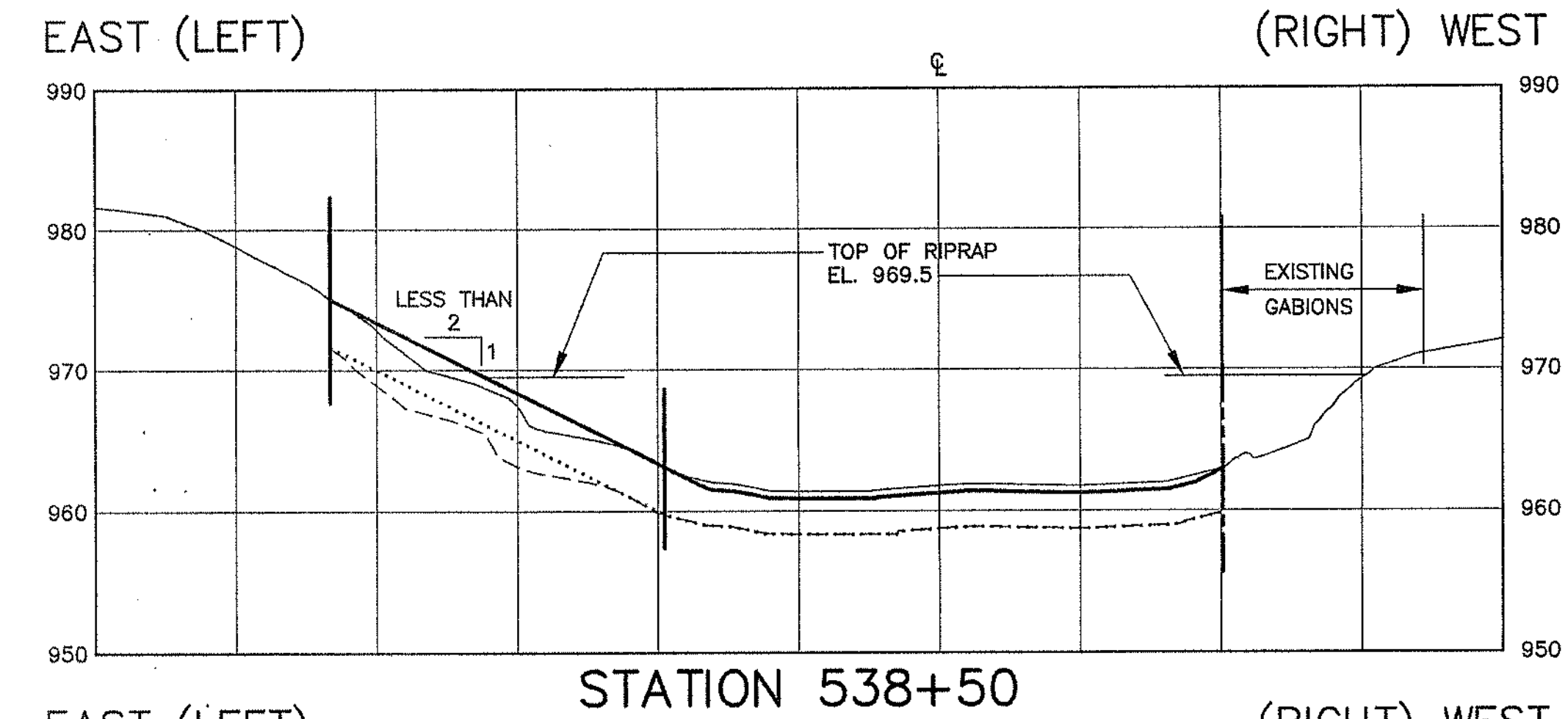
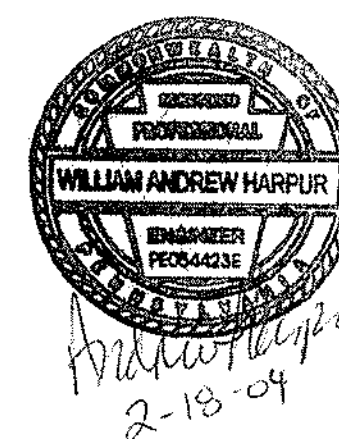


LEGEND

- EXISTING GRADE
- - - FINAL GRADE
- ... DEPTH OF CONTAMINATION
- - - EXCAVATION CUT LINE

NOTE:

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US Army Corps of Engineers
New England District

1.5 MILE REMEDIAL ACTION - PHASE 2 - STA 537+00 TO STA 543+00
ENVIRONMENTAL REMEDIATION CONTRACT (SSERC)
GE/HOUSATONIC RIVER SITE
PITTSFIELD, MASSACHUSETTS

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DWN BY: ELIFRITA TIBELANO
REVIEWED BY: [Signature]
SUBMITTED BY: [Signature]

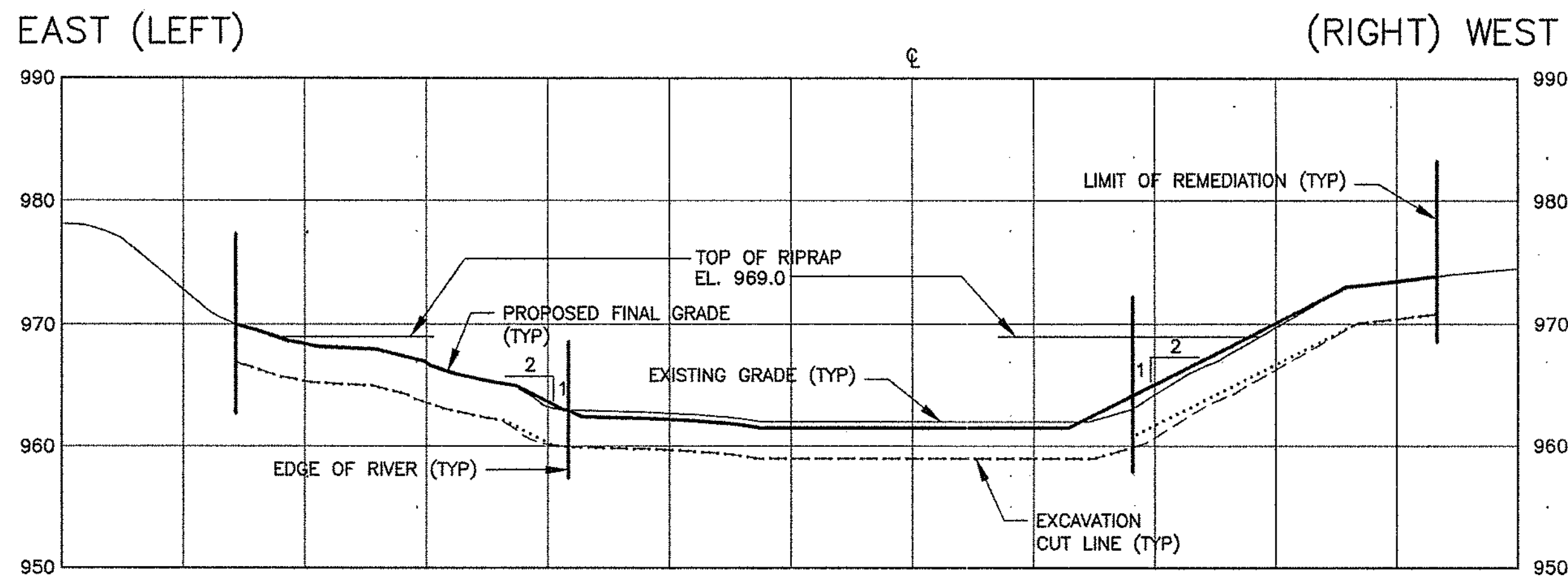
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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

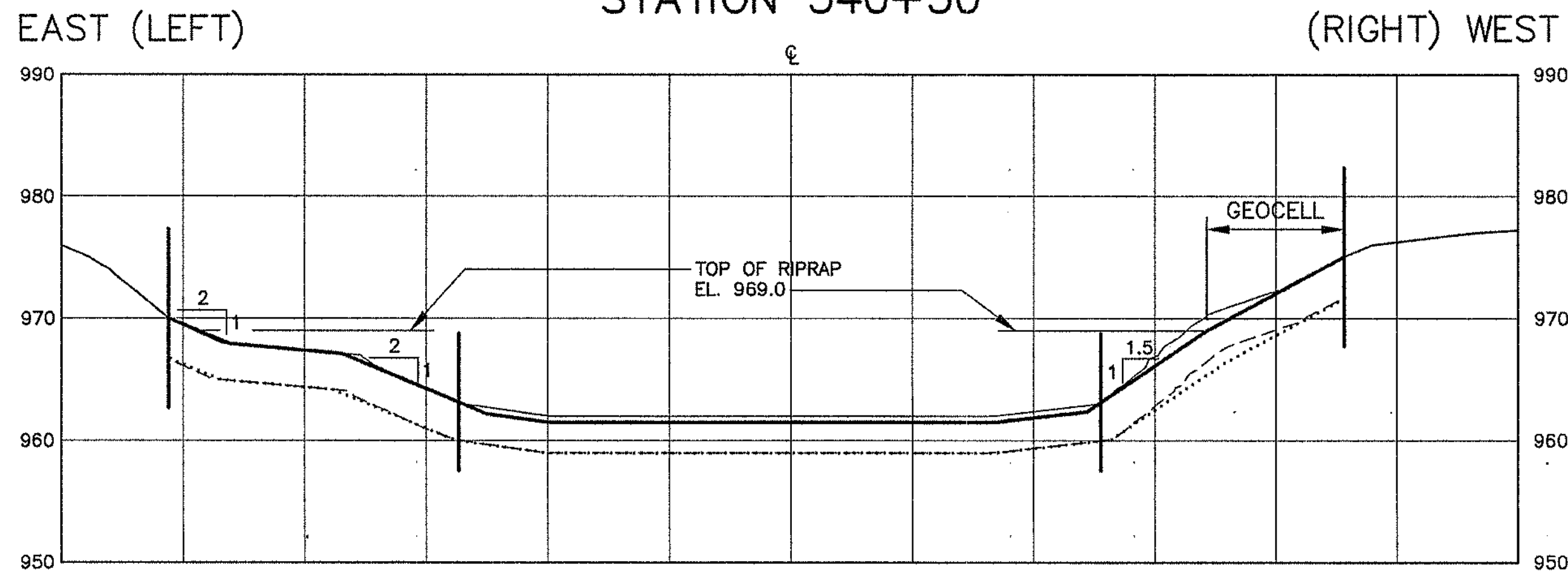
WESTON SOLUTIONS

CROSS SECTIONS
SHEET 3 OF 5

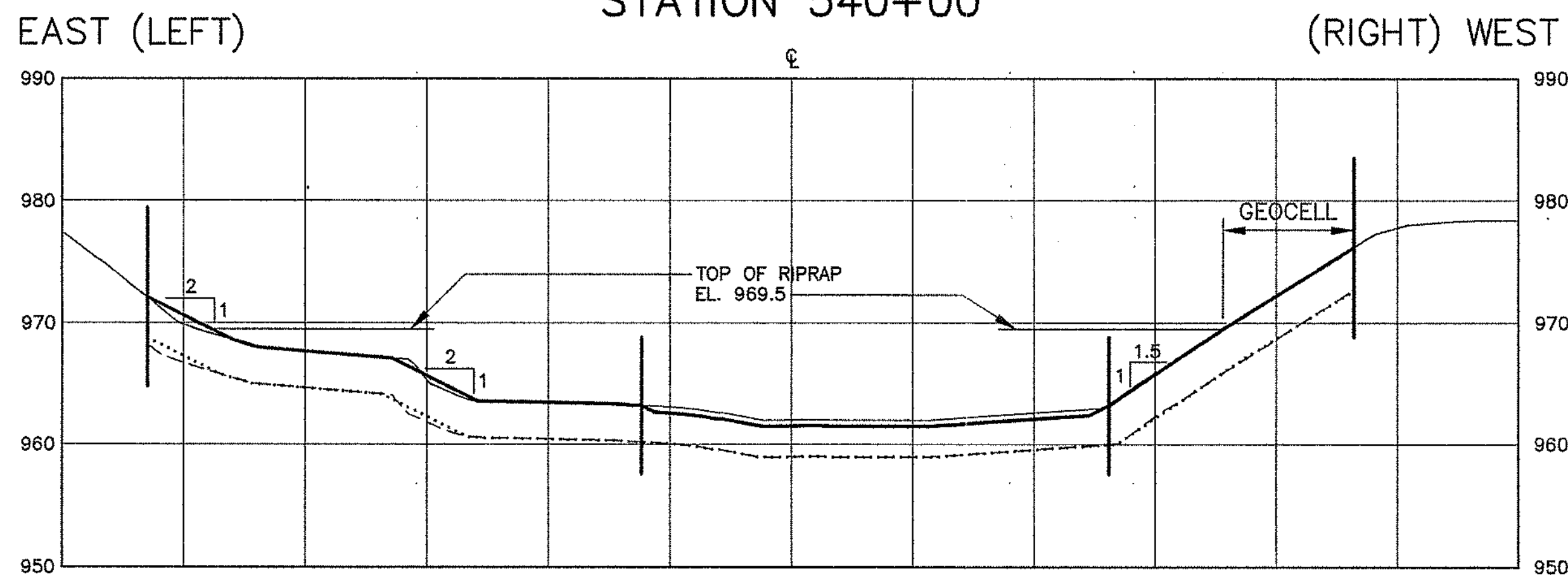
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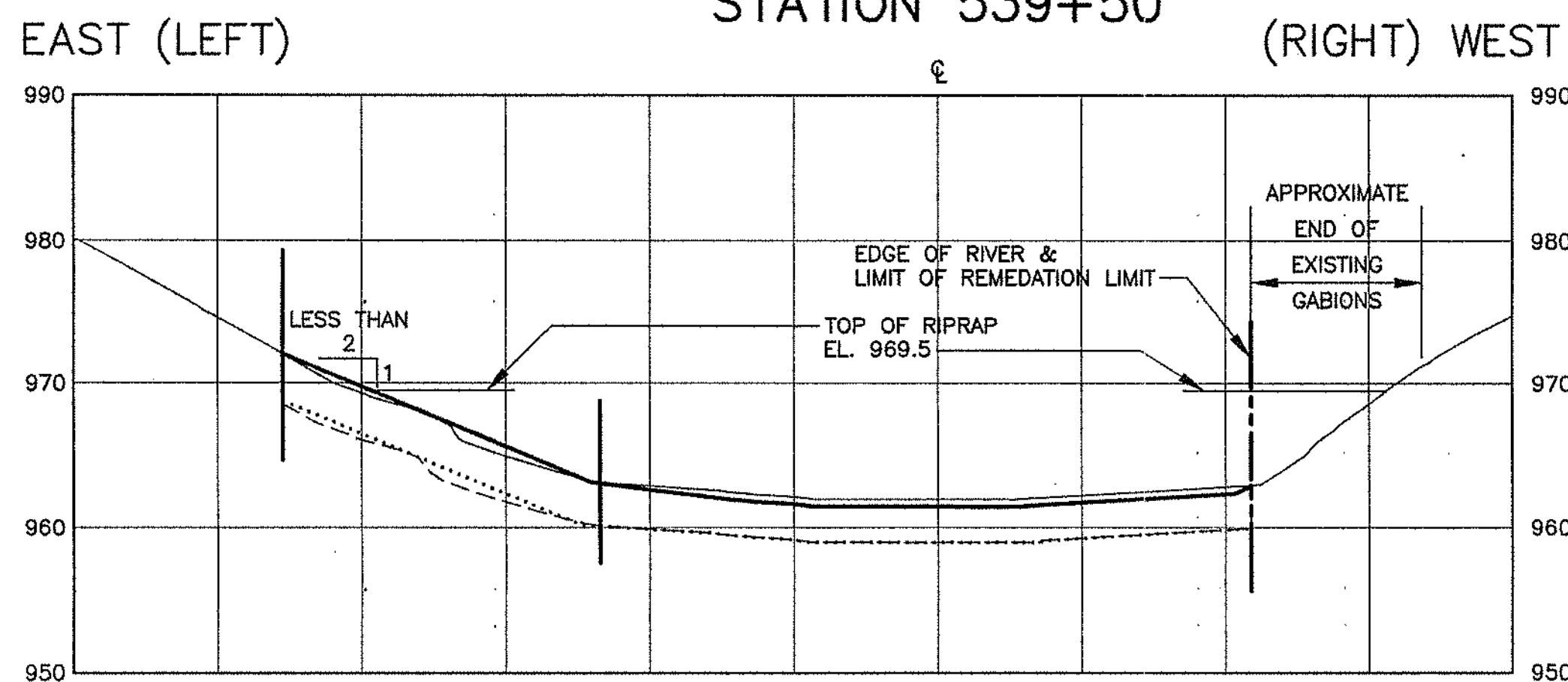
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STATION 540+00



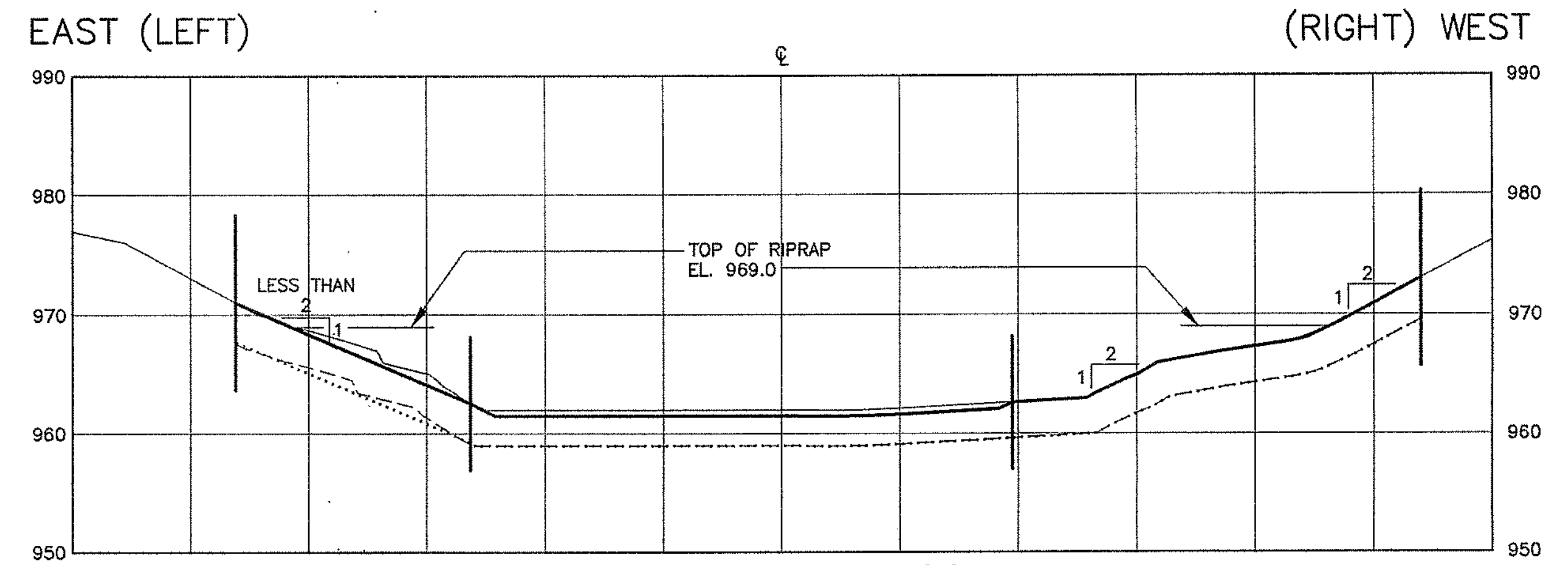
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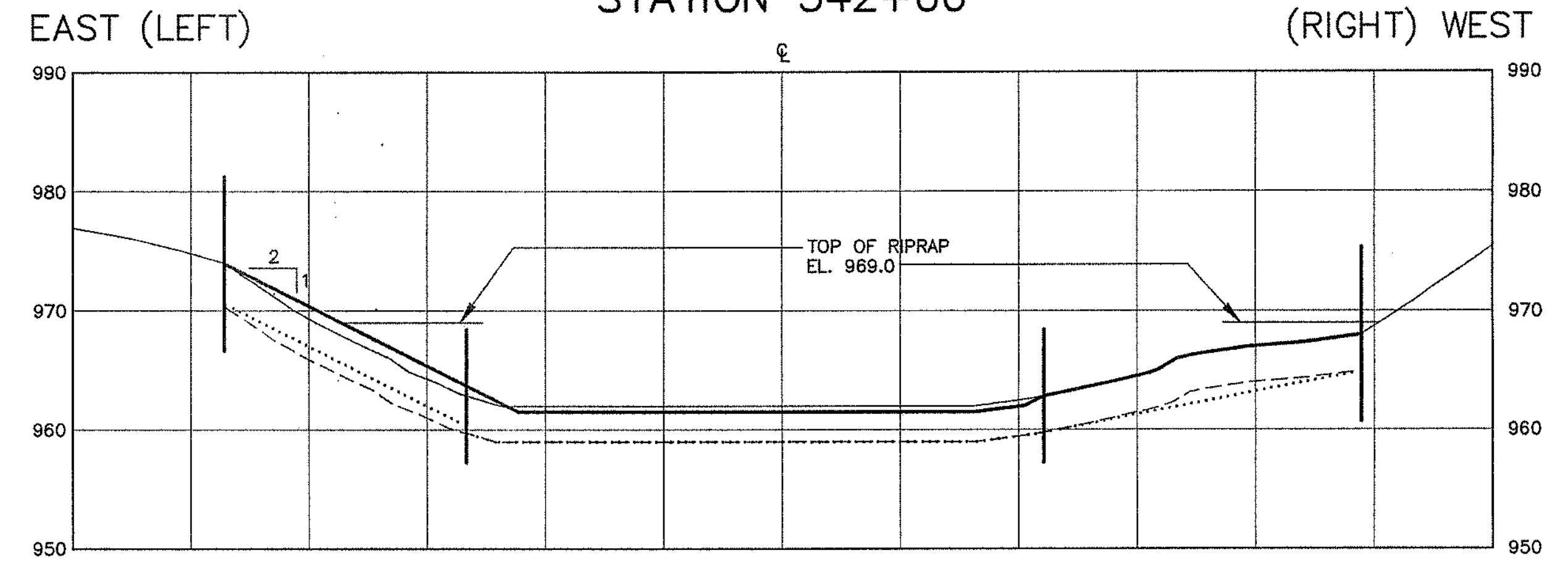
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LEGEND
 ——— EXISTING GRADE
 ——— FINAL GRADE
 - - - - - DEPTH OF CONTAMINATION
 EXCAVATION CUT LINE

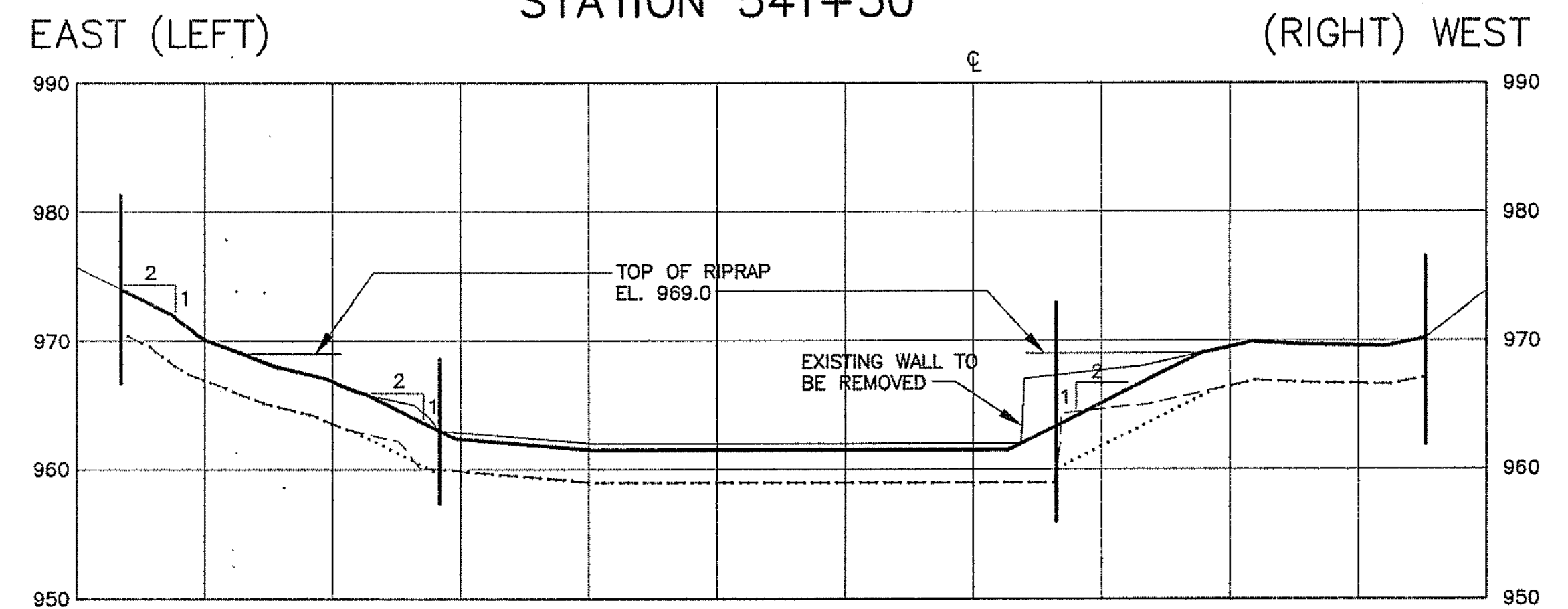
NOTE:
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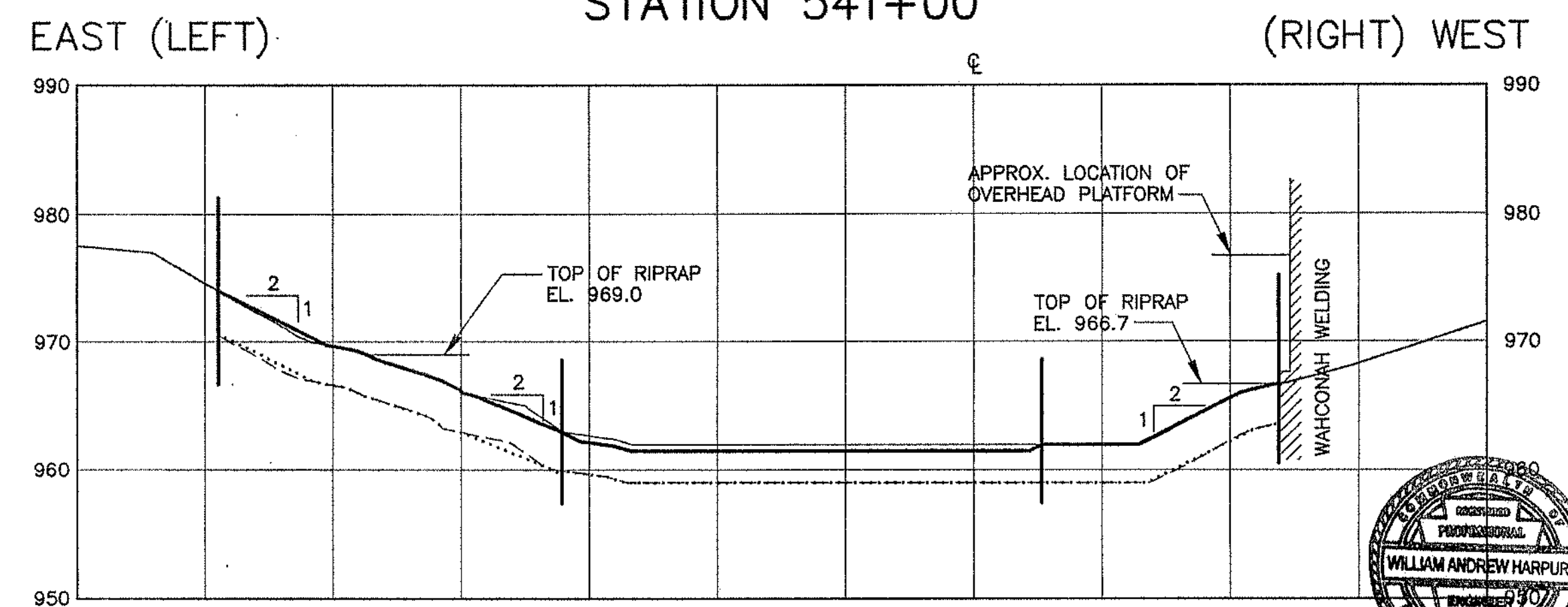
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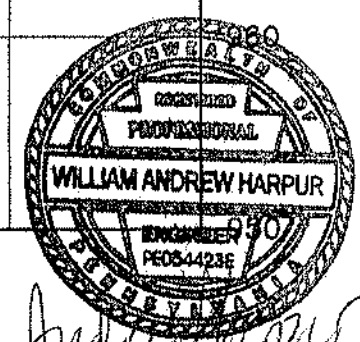
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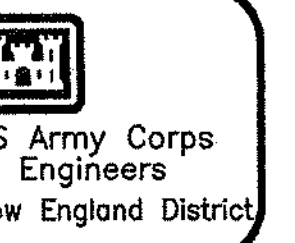
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STATION 540+75



FINAL DESIGN SUBMITTAL

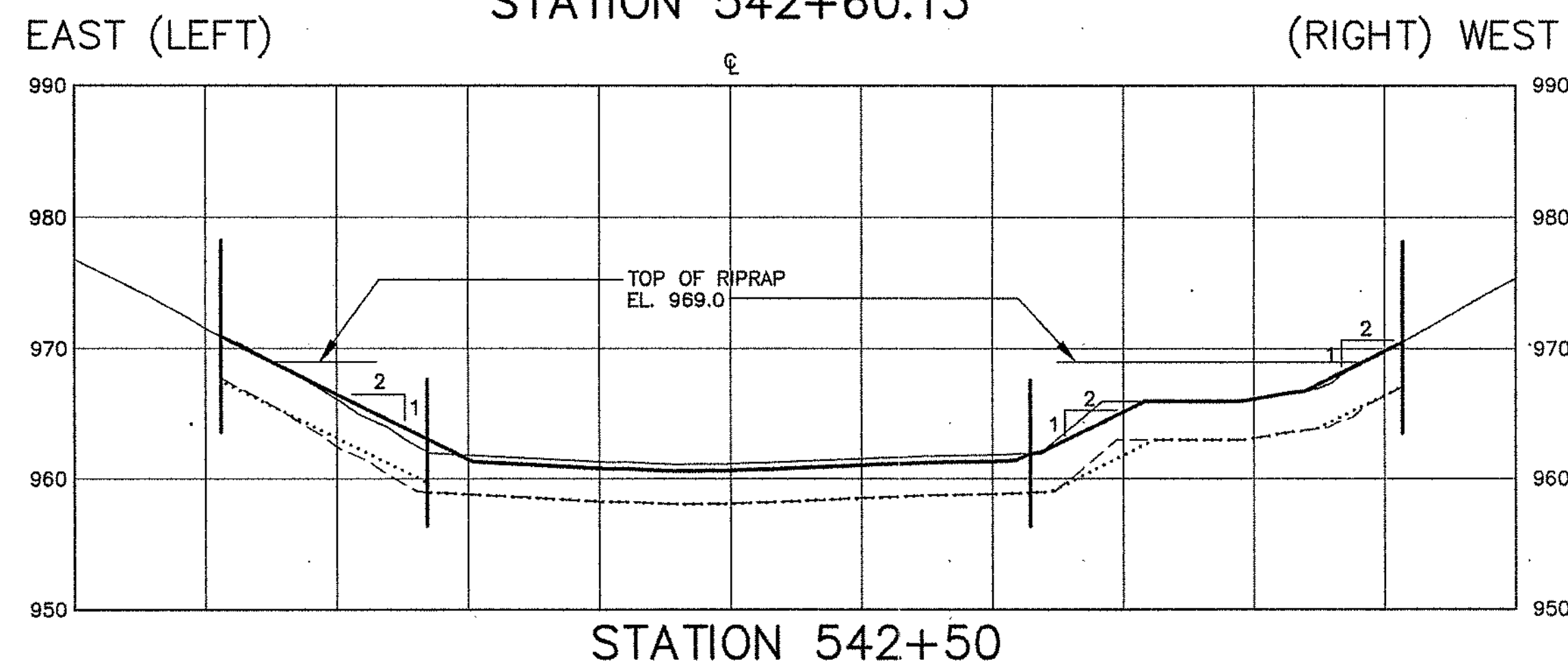
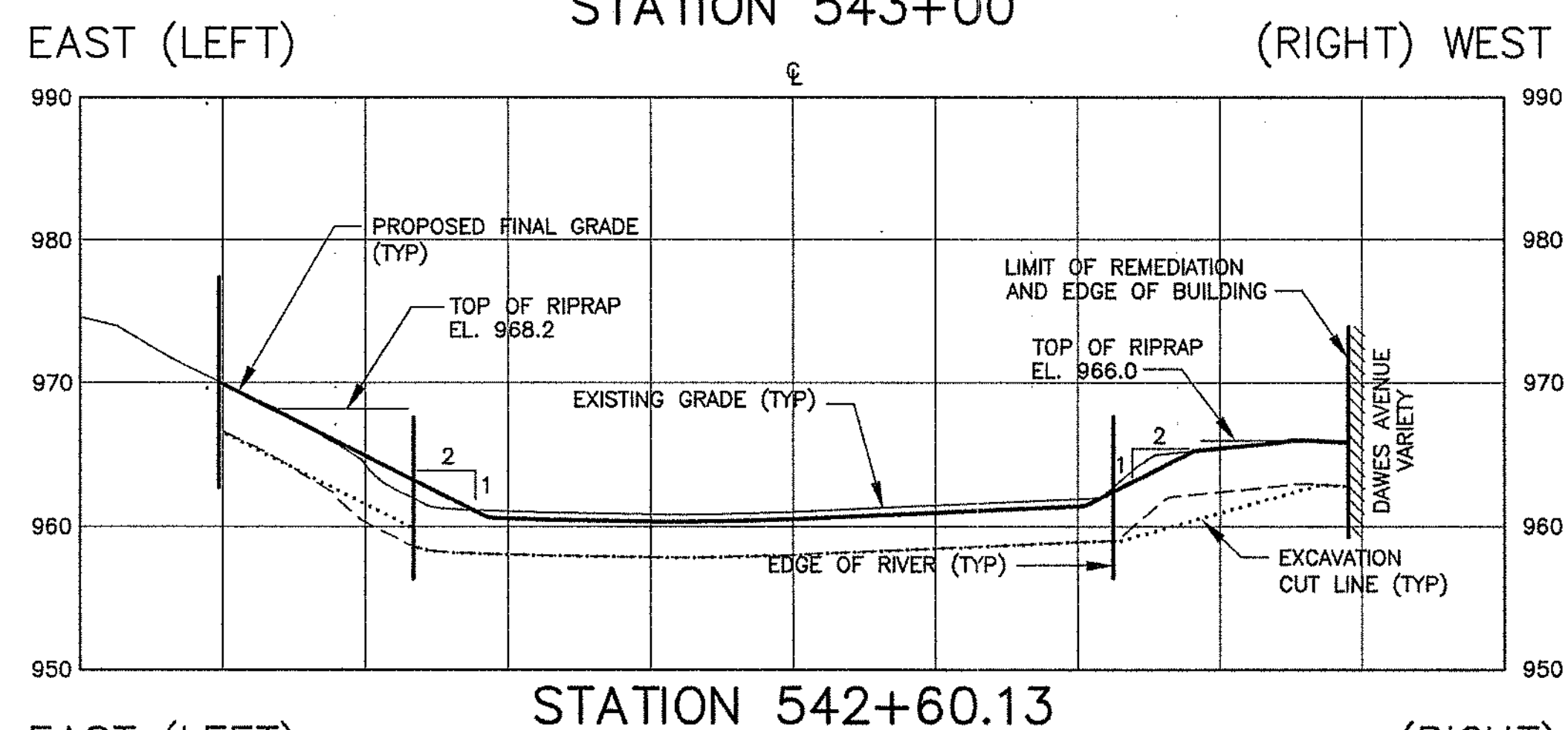
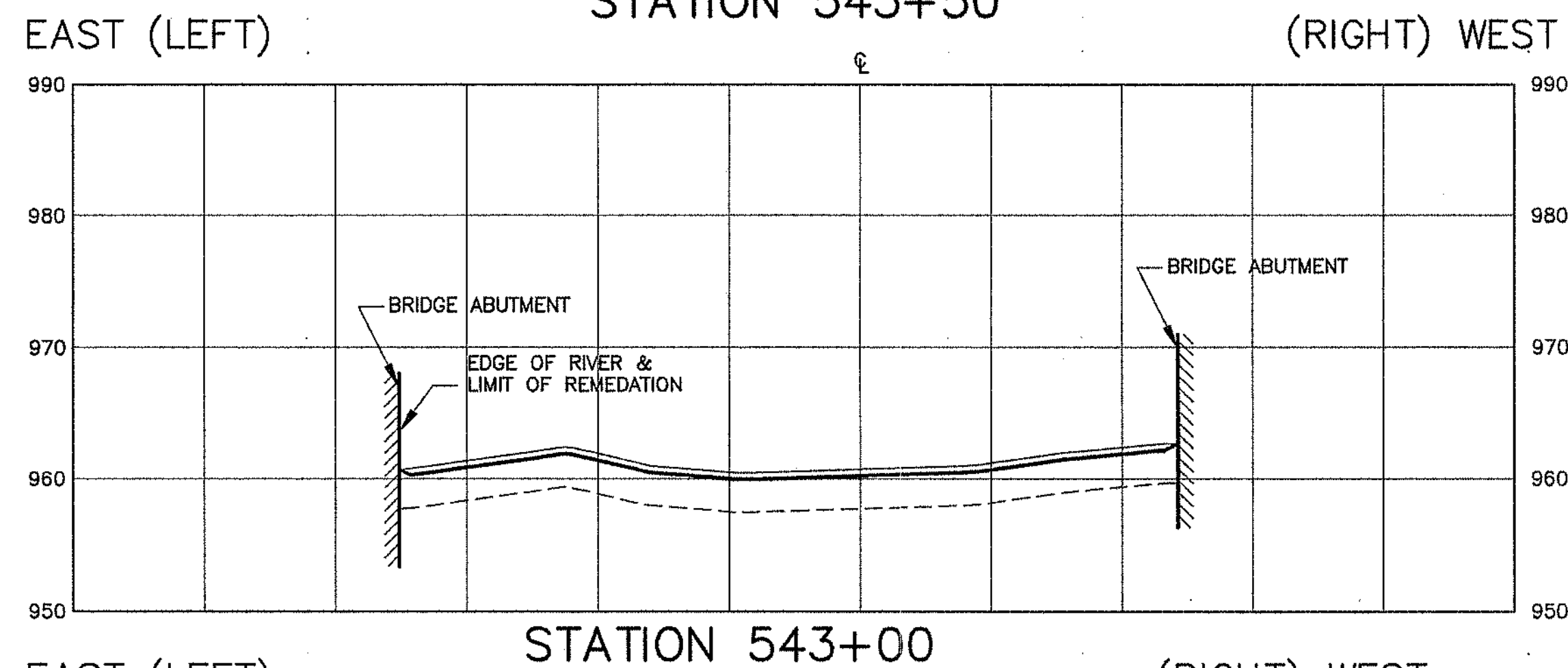
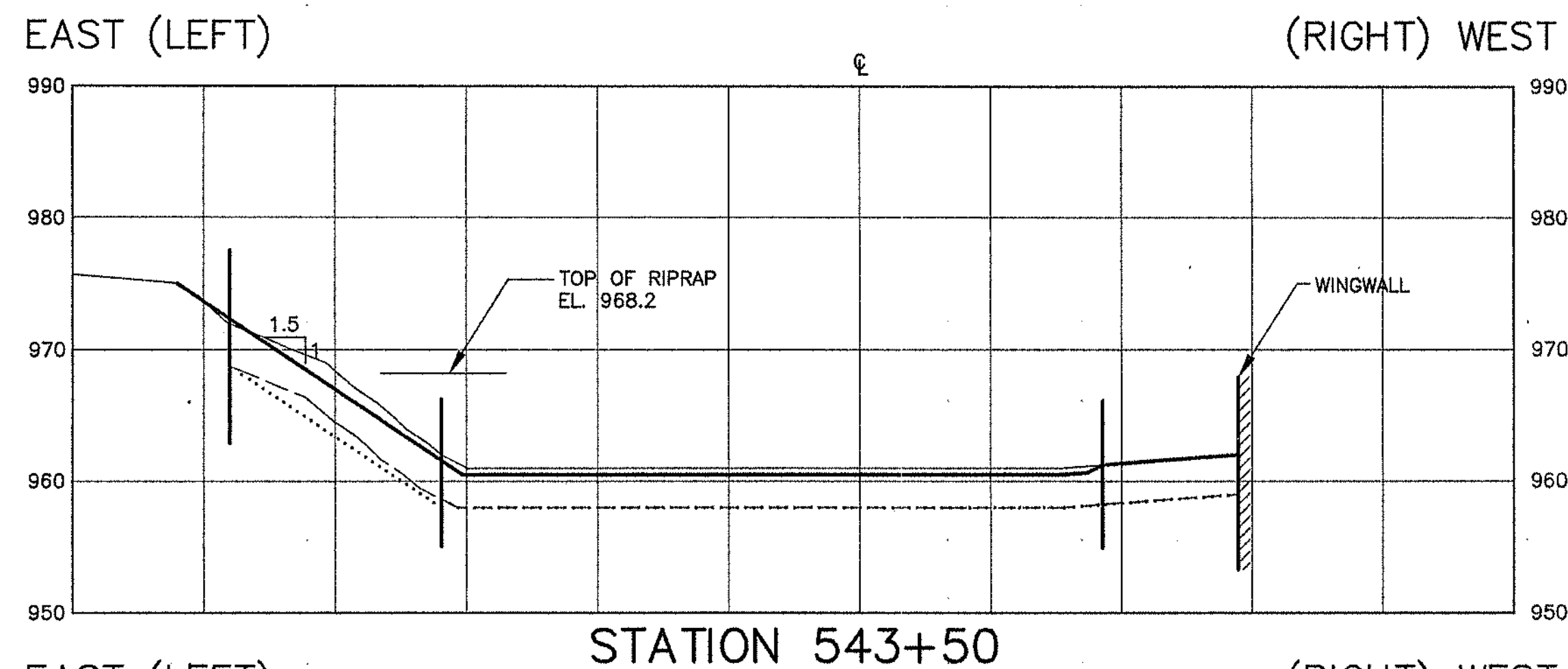


| Symbol | Description | Date | Appr. |
|--------|------------------------|----------|-------|
| B | FINAL DESIGN SUBMITTAL | 2/20/04 | |
| A | DRAFT DESIGN SUBMITTAL | 10/24/03 | |

| | | | |
|--------------|-----------|-----------------|----------------------|
| Designed by: | CHK'd by: | Reviewed by: | Submitted by: |
| MNH/WC | EDIFATA | TIDELAND | Chief, Arch. Section |
| Date: | 2/20/04 | Design file no: | |
| Rev: | B | SPEC. No.: | |
| | | File name: | 2006-2010 |
| | | Plot date: | 10/24/03 |
| | | Plot scale: | AS SHOWN |

1.5 MILE REMEDIAL ACTION - PHASE 2 - STA. 527+00 TO STA. 543+00
 ENVIRONMENTAL REMEDIATION CONTRACT (SSERC)
 GE/HOUSATONIC RIVER SITE
 PITTSFIELD, MASSACHUSETTS
 CROSS SECTIONS
 SHEET 4 OF 5

Sheet
 reference
 number:
 2009
 15 OF 17



LEGEND

— EXISTING GRADE

— FINAL GRADE

- - - DEPTH OF CONTAMINATION

..... EXCAVATION CUT LINE

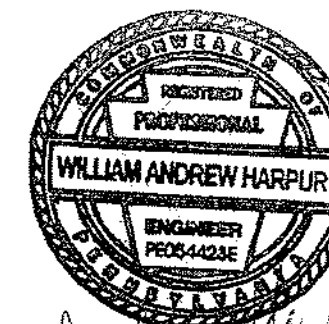
NOTE:

1. MATCH EXISTING GRADE UNLESS OTHERWISE NOTED.

2. MAXIMUM ALLOWABLE SLOPE IS 2H:1V, UNLESS OTHERWISE NOTED.

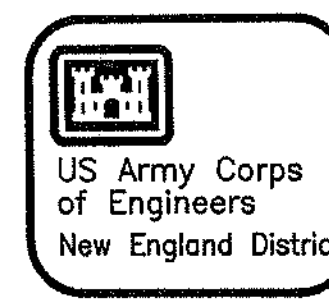
3. SLOPE INCLINATION FOR GEOCELL SHALL NOT EXCEED 1.5:1.

4. RIPRAP SHALL BE PLACED TO THE ELEVATION OF THE BREAK IN SLOPE WHEN THE SLOPE CHANGES FROM 1.5:1 BELOW THE BREAK TO 2:1 ABOVE THE BREAK. IF THERE IS NO BREAK IN SLOPE, RIPRAP SHALL EXTEND UP THE RIVER BANK TO THE MINIMUM ELEVATION AS INDICATED AT EACH SECTION.



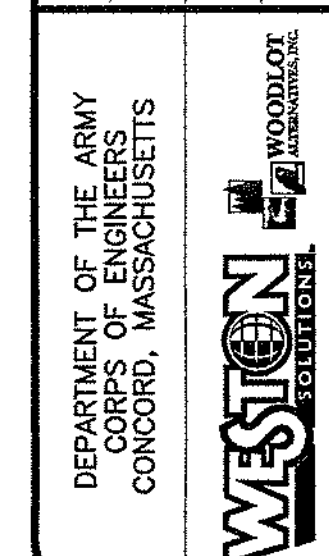
Andrew Harpur
2-18-04

FINAL DESIGN SUBMITTAL



| Rev. | Date | By | Description |
|------|----------|--------|------------------------|
| B | 2/20/04 | EDRATA | FINAL DESIGN SUBMITTAL |
| A | 10/24/03 | EDRATA | DRAFT DESIGN SUBMITTAL |

| Rev. | Date | By | Description |
|------|----------|--------|------------------------|
| B | 2/20/04 | EDRATA | FINAL DESIGN SUBMITTAL |
| A | 10/24/03 | EDRATA | DRAFT DESIGN SUBMITTAL |



1.5 MILE REMEDIAL ACTION - PHASE 2 - STA 527+00 TO STA 543+50
ENVIRONMENTAL REMEDIATION CONTRACT (SSERC)
GE/HOUSATONIC RIVER SITE
PITTSFIELD, MASSACHUSETTS

CROSS SECTIONS
SHEET 5 OF 5

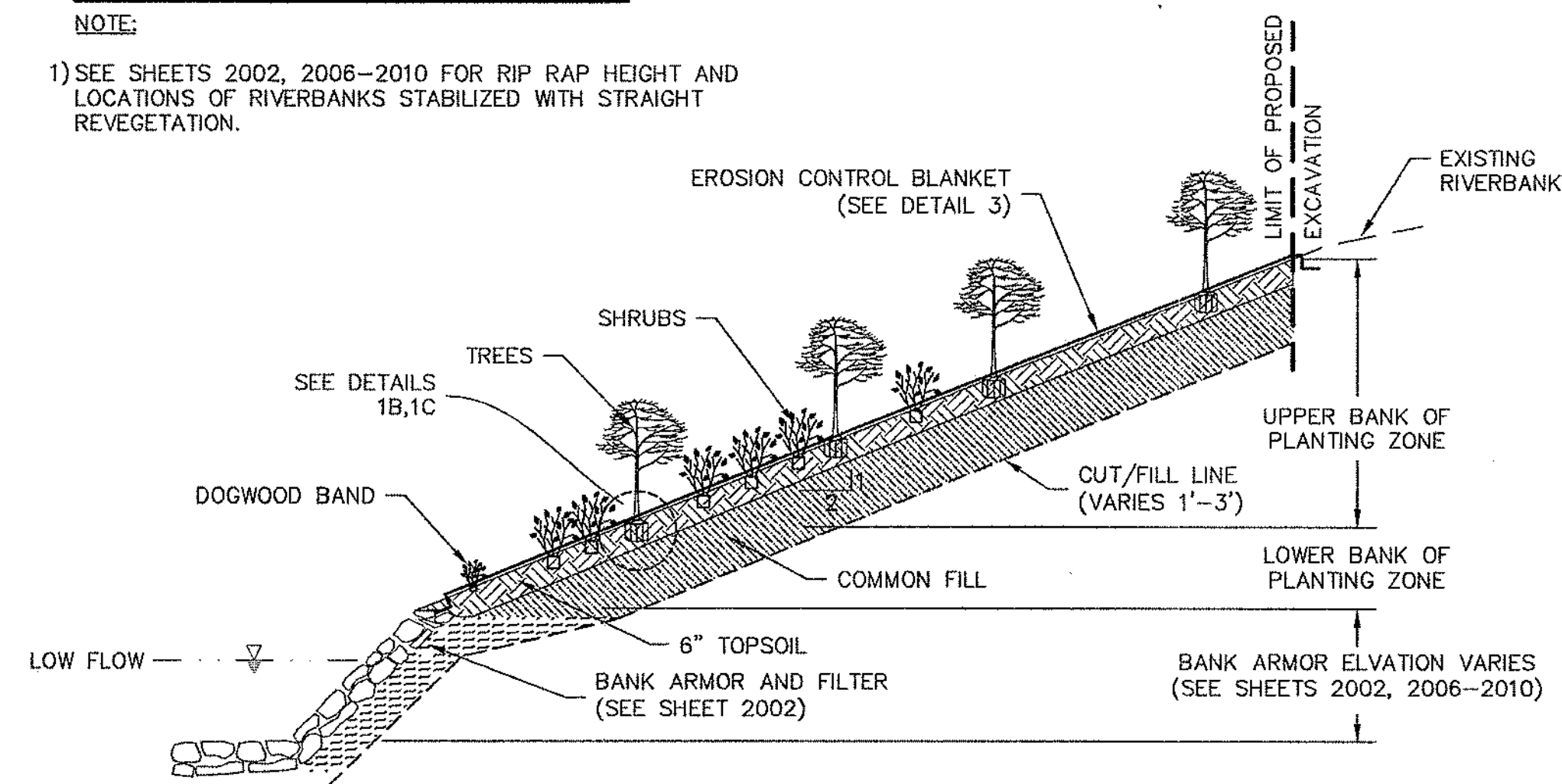
Sheet reference number:
2010
16 OF 17

NOT TO SCALE (SLOPE GRADE AND LENGTH VARY)



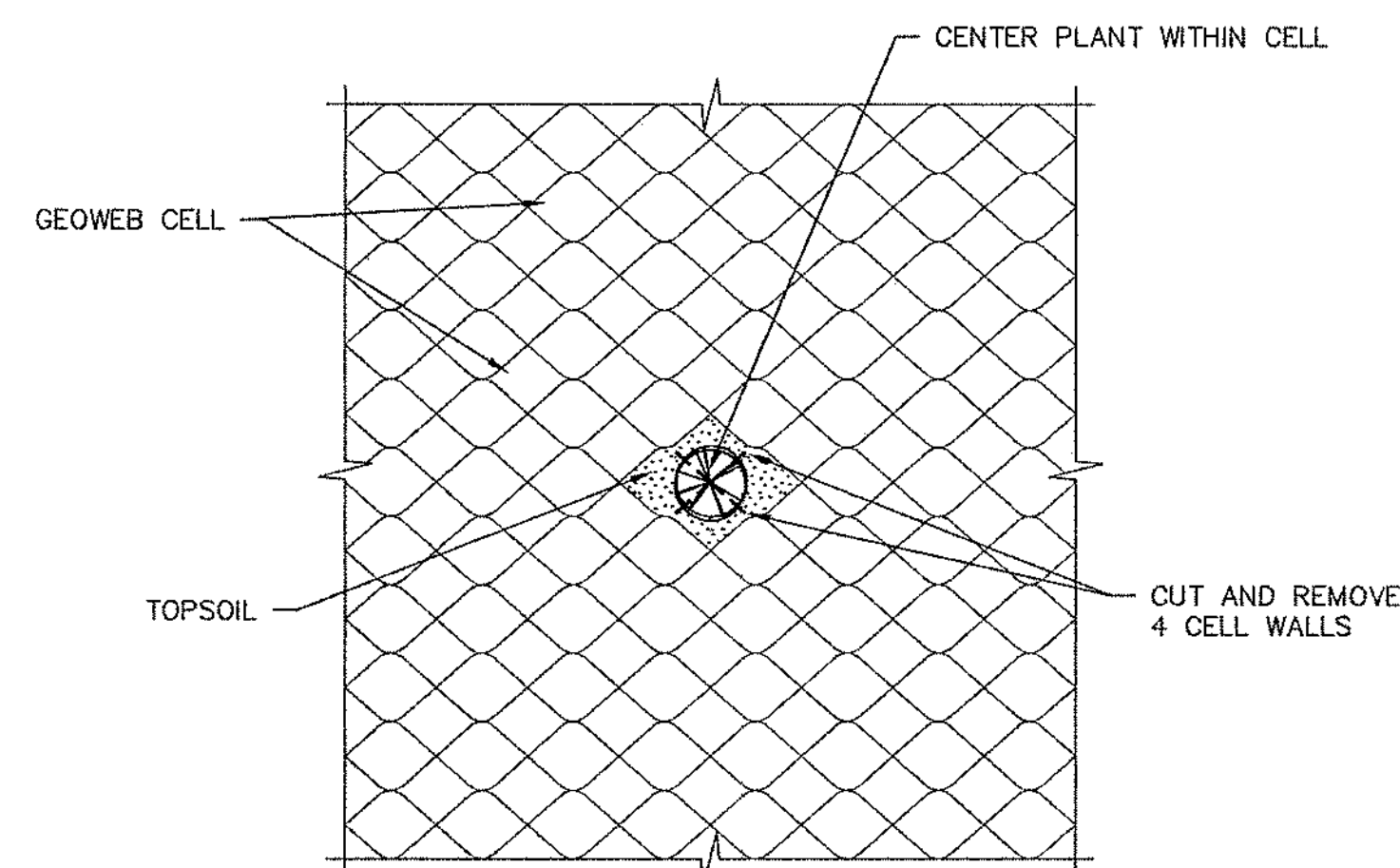
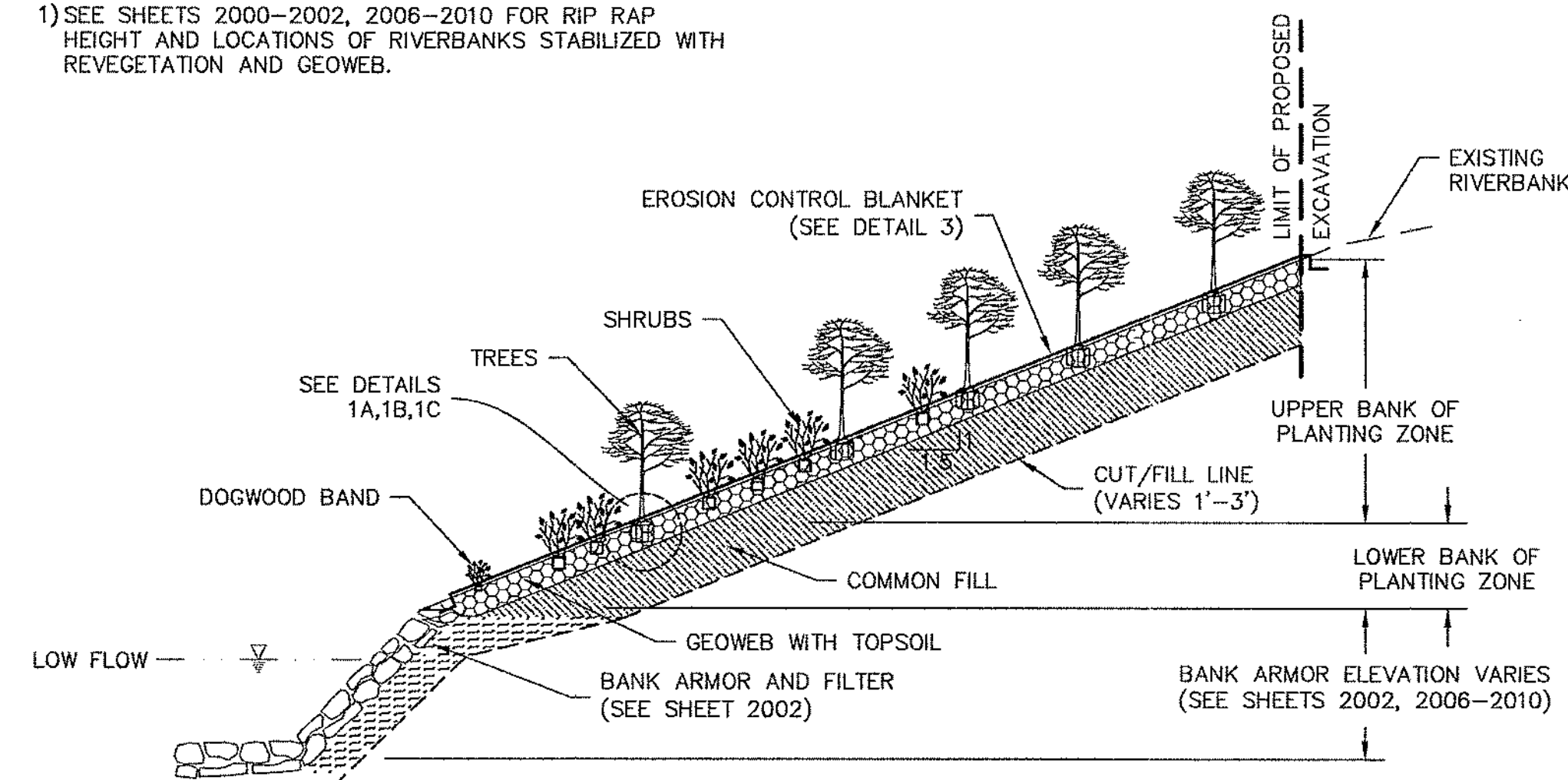
NOTE:

1) SEE SHEETS 2002, 2006-2010 FOR RIP RAP HEIGHT AND LOCATIONS OF RIVERBANKS STABILIZED WITH STRAIGHT REVEGETATION.

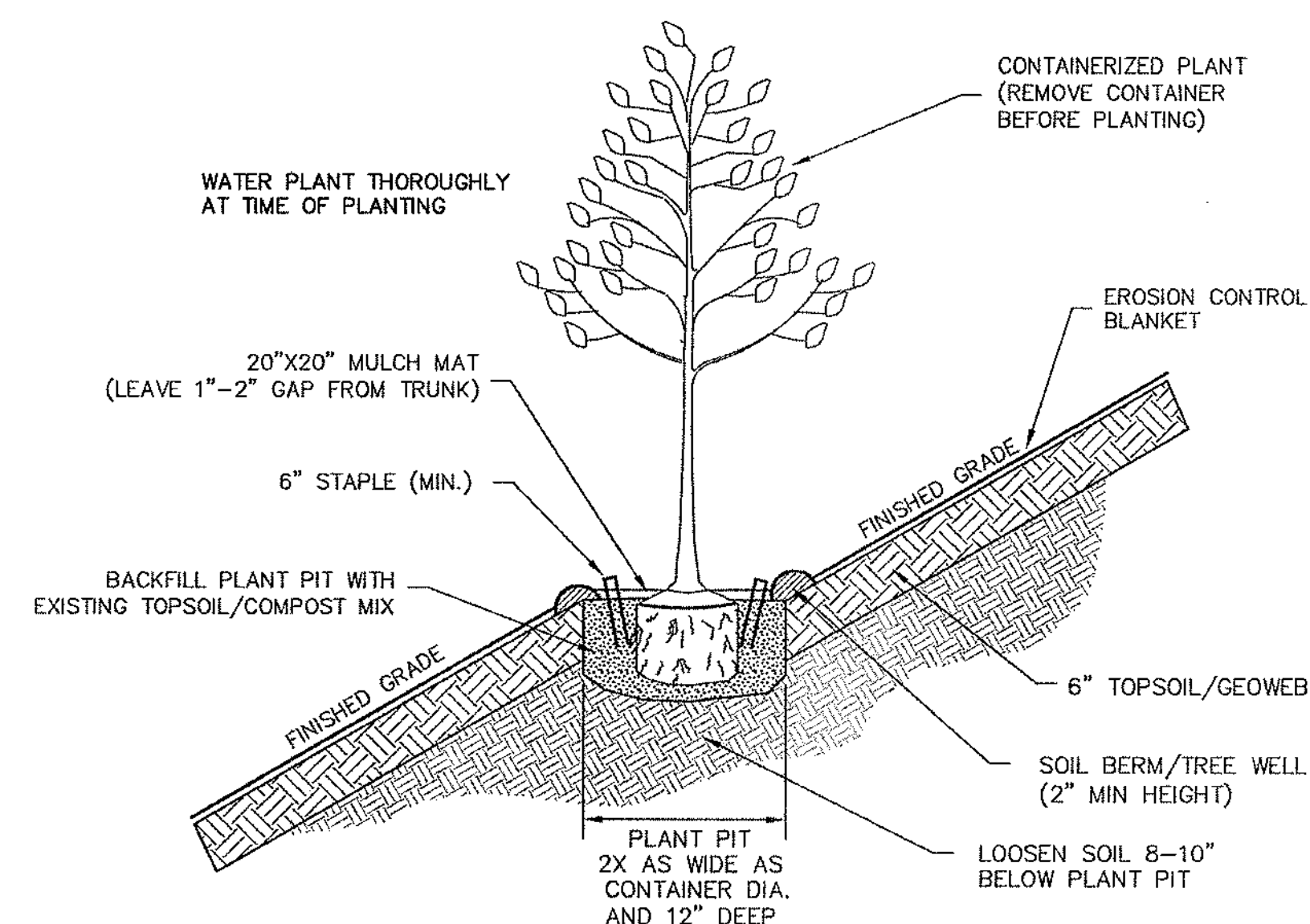


NOTE:

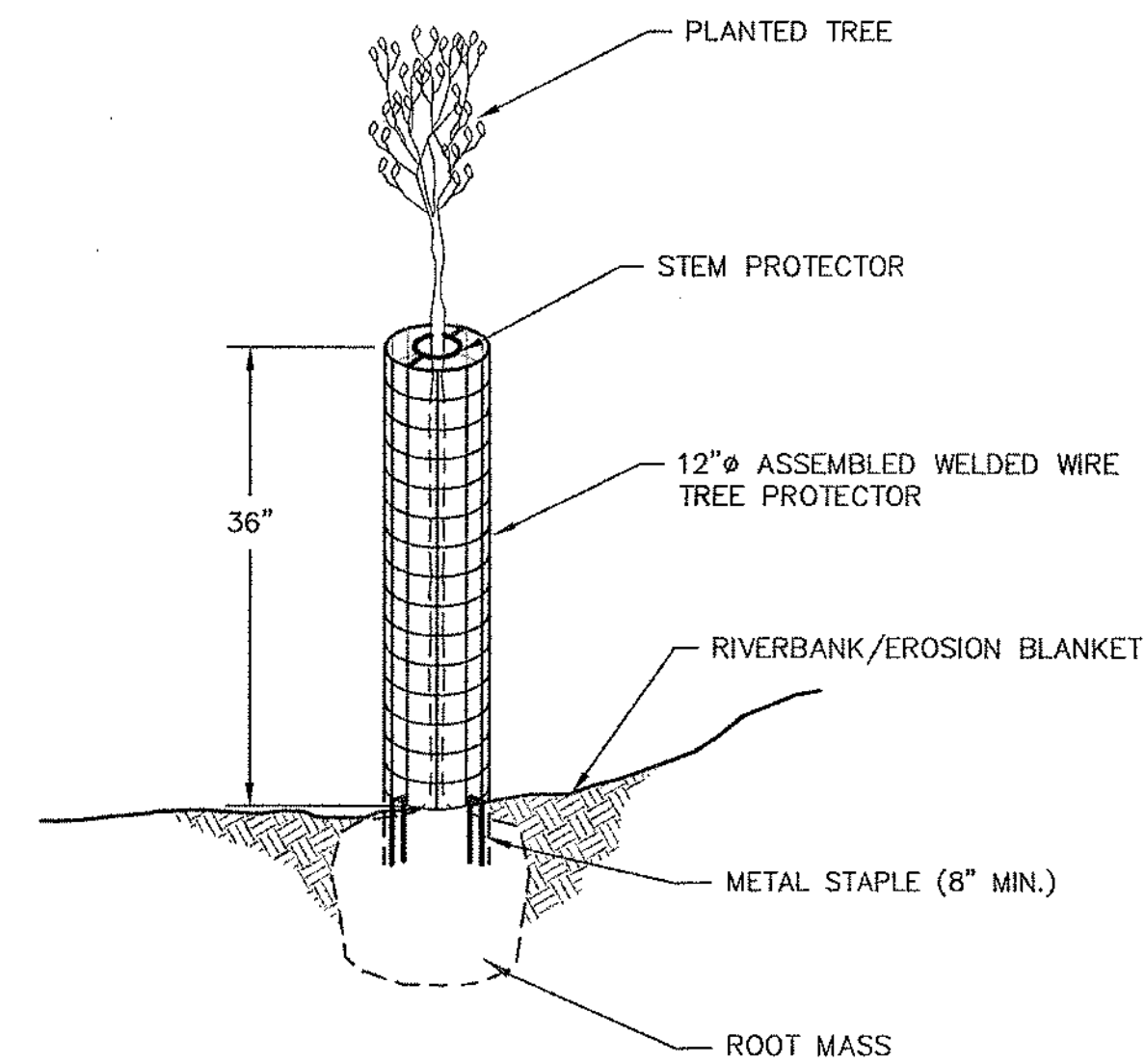
1) SEE SHEETS 2000-2002, 2006-2010 FOR RIP RAP HEIGHT AND LOCATIONS OF RIVERBANKS STABILIZED WITH REVEGETATION AND GEOWEB.



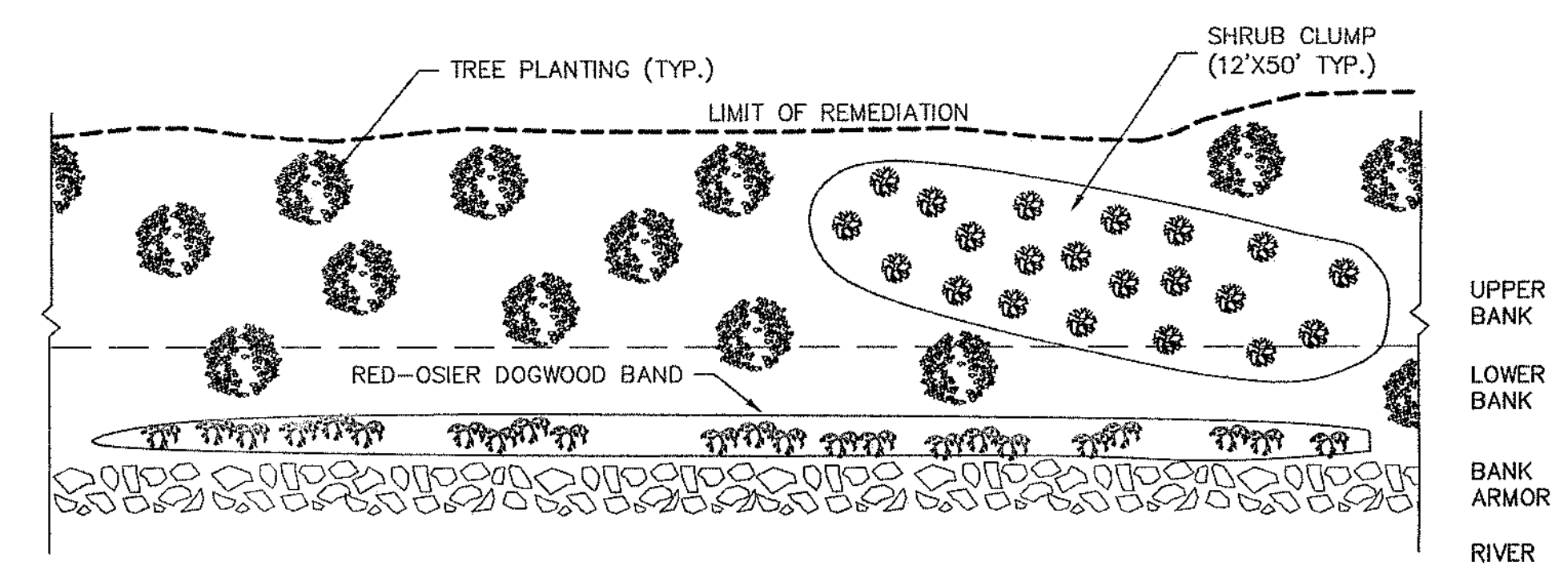
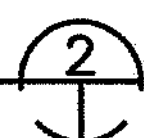
A



DETAIL 1C—TREE PROTECTOR



NOT TO SCALE



NOTE:

1) SEE SHEETS 2002, 2006-2010
FOR HEIGHT OF RIP RAP.

NOT TO SCALE



The technical drawing consists of two parts: a cross-section view on the left and a perspective view on the right.

Cross-section view (left): Shows a sloped bank covered by an "EROSION CONTROL BLANKET". A vertical section of the blanket is shown with a height of "6" MIN." and a width of "6" MIN.". Below this, a "BIODEGRADABLE STAKE, PIN, OR STAPLE (6" MIN. LENGTH EVERY 3")" is shown. The base of the blanket is labeled "COMPACTED BACKFILL". Dimensions include "1.5' MIN." for the horizontal distance from the slope to the backfill and "6" MIN." for the width of the blanket at the base.

Perspective view (right): Shows a 3D view of the bank armor system. It features "BIODEGRADABLE STAKES, PINS, OR STAPLES (6" MIN. LENGTH)" driven into the blanket. The stakes are spaced "3' TYP." apart. The blanket has a "4" OVERLAP MIN." and a "1.5' MIN." gap between sections. The system is installed on a "BANK ARMOR" which is "20" HIGH". The flow direction is indicated by an arrow labeled "FLOW".

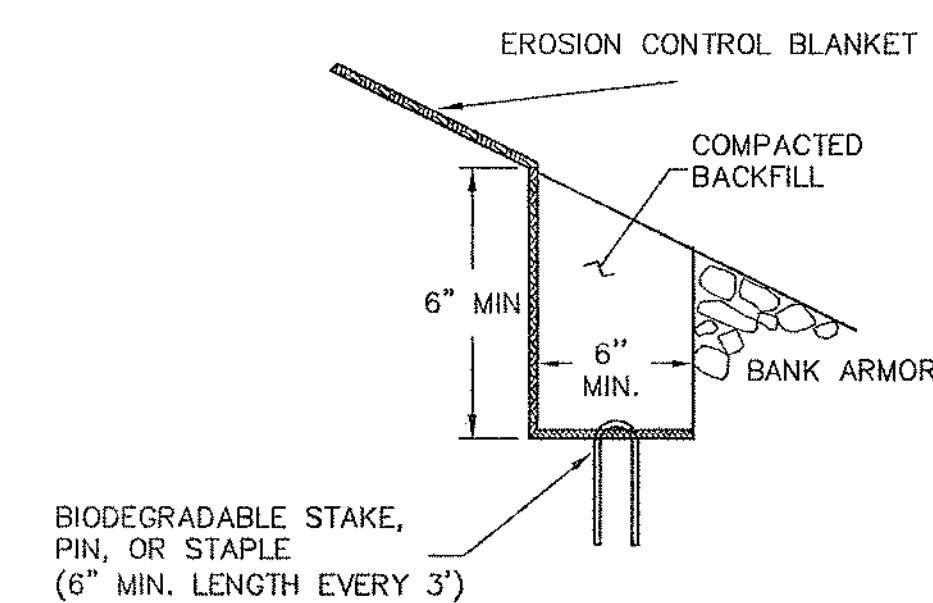
DETAIL 3A: A circular inset showing a close-up of the blanket overlap and the stake/pin/staple installation.

DETAIL 3B: A circular inset showing a close-up of the bank armor and the stake/pin/staple installation.

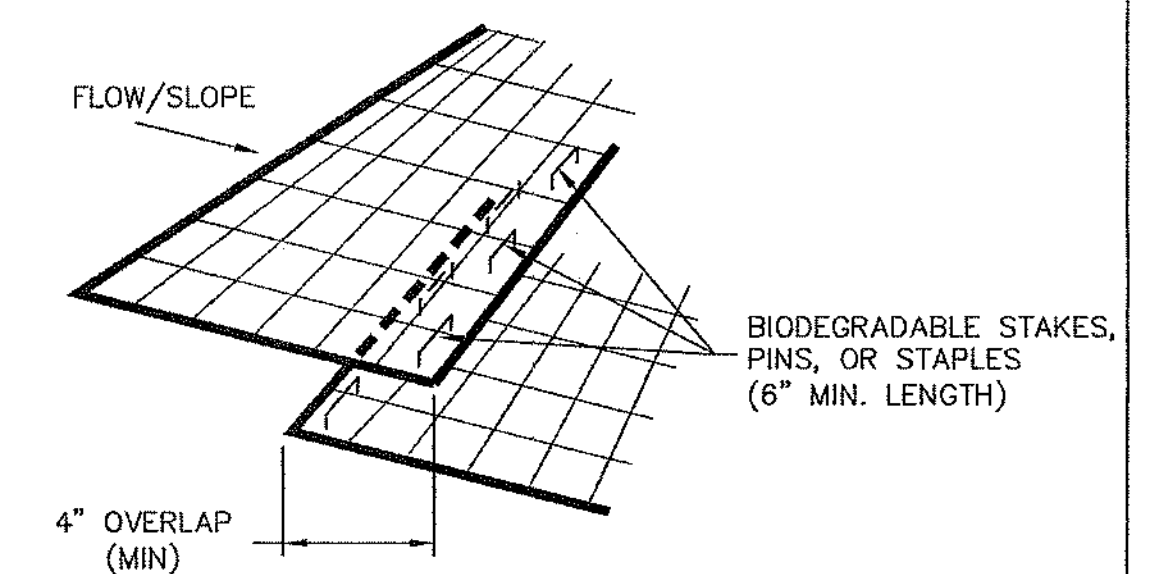
SEE DETAIL 3C: A circular inset showing a close-up of the blanket overlap and the stake/pin/staple installation.

NOTE: 1) SEE SHEETS 20 FOR TOP HEIGHT OF

DETAIL 3A




DETAIL 3B



DETAIL 3C


NOTE:

1) SEE SHEETS 2002, 2006-2010
FOR HEIGHT OF RIP RAP.



US Army Corps
of Engineers
New England District

| Symbol | Description | Date | Aspr | Symbol | Description | Date | Aspr |
|--------|------------------------|----------|------|--------|-------------|------|------|
| B | FINAL DESIGN SUBMITTAL | 2/20/04 | | | | | |
| A | DRAFT DESIGN SUBMITTAL | 10/24/04 | | | | | |

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|  WESTON SOLUTIONS | DEPARTMENT OF THE ARMY CORPS OF ENGINEERS CONCORD, MASSACHUSETTS | | Design file no: Design by: | | Date: | |
| | Div by: | | Old by: | | Date: | |
| | Reviewed by: | | SPEC. No.: | | File name: 2101 | |
| | Submitted by: | | Chief, Arch. Section | | Plot date: 2/11/04 Plot scale: 1"=10' | |

1.3 MILE REMEDIAL ACTION - PHASE 2 - 31A 321/480 TO 31A 343/350
ENVIRONMENTAL REMEDIATION CONTRACT (SSERC)
GE/HOUSATONIC RIVER SITE
PITTSFIELD, MASSACHUSETTS
REVEGETATION RESTORATION DETAILS

Sheet
reference
number:
2101

FINAL DESIGN SUBMITTAL